Cognitive semantics of the qualitative suffix in the Japanese spatial demonstratives *koko*, *soko*, and *asoko*: SPACE, THING, and TIME

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A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy in Asian Studies, The University of Auckland, 2012

Abstract

This thesis is the first systematic study of Japanese spatial demonstratives from cognitive and pragmatic points of view. The morphology of Japanese demonstratives is composed of series of forms having the deictic roots the *KO*- 'proximal', *SO*- 'medial' and *A*- 'distal' plus various qualitative suffixes. This study focuses on the *–ko* suffix for the spatial category mainly in the exophoric (deictic) use.

Studies of Japanese demonstratives have a long history, in which the deictic root of demonstratives, *KOSOA*, has been scrutinized as a three-term system of demonstratives. However, qualitative parts of deictic expressions have not been paid much attention. This thesis carries out an in-depth semantic analysis of the *–ko* suffix separated from the deictic roots *KOSOA*, which results in defining meanings of the *–ko* suffix without the influence of the notion DISTANCE, and also analyzes the pragmatic relationships between the conceptual properties of the *–ko* suffix revealed in this study and the deictic contrasts of *KOSOA*.

Secondly, construal alternatives of demonstrative pronouns between the *–ko* suffix 'place' and the *–re* suffix 'thing' are examined in order to illustrate how different conceptualizations of the facets of the same referent are expressed by these alternative forms. Finally, based on the conceptual properties of the *–ko* suffix, it will investigate how spatial demonstratives can be employed as temporal expressions transferring from the SPACE domain to the TIME domain.

The main methodology of this thesis is a discourse based analysis, the data for which consists of one thousand examples of the *–ko* suffix mainly collected from three texts (two novels and one essay) and extra examples from various novels and the Internet. Key concepts from the cognitive and pragmatic approaches for the discussions include the deictic centre, image schemas, deictic contrasts, and construal alternatives.

Dedication

I dedicate this thesis to my mother

Obarin (1941-2012)

Acknowledgements

This thesis has been completed thanks to all kinds of support and help. I have no way to express my appreciation to all persons related to this work.

Firstly, my deepest thanks go to my supervisors Dr. Harumi Minagawa from the School of Asian Studies and Dr. Frank Lichtenberk from the Department of Applied Language Studies and Linguistics. Dr. Minagawa as the main supervisor guided me to a deeper understanding of the semantics for a more accurate analysis of the data. Without her insightful guidance, helpful suggestions and patience with the slow processes of my thesis, I could not have finished this study. Dr. Lichtenberk as the co-supervisor gave me a great deal of advice from his cognitive approach and extensive knowledge of linguistic typology, which helped me to reach a deeper level of analysis. Their meticulous and extensive supervision of my drafts were of the highest value.

My sincere thanks also go to Dr. Wayne Lawrence who was always willing to answer my questions about the thesis, suggested efficient solutions and checked my final drafts. I am also very grateful to Dr Bethwyn Evans who proof read the final draft and made many useful comments. I also have to mention the staff in the School of Asian Studies who looked after me during my long period of research.

Finally, I would like to thank my wife Dr. Ellen Nakamura for checking my English and for her moral support. This work is dedicated to my father Ryoozoo, mother Fusako, father in law Colin, mother in law Bernice, and my two daughters Roena and Emma, with whose encouragements I could conquer the hardest periods of the writing. Thank you very much to all of them.

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Abbreviations

ACC	accusative case (*o*)
COMP	sentential complementiser (*no, koto, tokoro*)
COP	copula (*da, dearu, desu*)
DAT	dative case (*ni*)
FOC	focus particle (*sae, MADE, mo*)
GEN	genitive case (*no*)
LINK	predicate inflection (verb+*te*/*de*, *de*)
LOC	locative case (*ni, de*)
NOM	nominative case (*ga*)
QUO	quote (*to*)
SF	sentence-final particle (*yo, ne, kedo*)
TOP	topic marker (*wa*)

Chapter 1 Introduction

1.1 Overview

This is a study of demonstratives in Japanese. Demonstratives are one of the major lexical classes in cross-linguistic comparisons, because all languages have one or more demonstratives, but their forms, meanings and functions vary greatly (Diessel 1999 and Dixon 2003).

From a universal perspective, Lyons (1977), Fillmore (1982) and Diessel (1999, 2005) remark that demonstratives may carry two types of semantic features: firstly deictic features, which indicate the location of a referent in the speech situation such as proximal, medial or distal, and secondly qualitative features, which classify a referent by [thing], [place] or [person].[1]

In Japanese, these two features are coded morphologically in a distinctive way: one is a deictic root such as the *KO-*, *SO-* or *A*-series,[2] which are conventionally called ***KOSOA*** in the field of Japanese linguistics.[3] The second part consists of various types of qualitative suffixes such as *KO-**re*** 'this **one**', *KO-**ko*** 'this **place**', *KO-**tchi*** 'this **way**', and *KO-**itsu*** 'this **guy**'.[4] The relationship between forms and general meanings in Japanese demonstrative pronouns can be summarized as follows:

[1] I will use the following notational system to distinguish representations of meanings throughout this thesis: (i) single quotation marks '' for general meanings of words and translation from Japanese to English, (ii) brackets [ ] for specific semantic features such as [place], (iii) large capital letters for conceptual and pragmatic properties such as PLACE (I will introduce other uses for small capitals in 4.3.3). This distinction is crucial for the analysis presented in the thesis and I will explain this in 5.1. I will use italics to denote expressions or forms. Double quotation marks are used for direct quotations or specific terms for theoretical notions.

[2] I use Hepburn Romanization (ISO3602). The long vowels are marked as *aa, ii, uu, ee*, and *oo*, instead of using a macron.

[3] In addition to *KOSOA*, Japanese demonstratives have the *DO*-series for interrogatives such as *DO-re* 'which one?', *DO-ko* 'which place?', *DO-itsu* 'which guy?' and *DO-tchi* 'which direction?'.

[4] Additionally, Japanese demonstrative pronouns can carry the *–ra* suffix, which has various kinds of meanings such as *kore-ra* [plural], *kochi-ra* [honorific] and *koko-ra* [non-specific]. I will discuss some issues concerning the difference between *koko* 'this place' and *kokora* 'around this place' in 5.2.6.

Table (1.1): Forms and meanings in Japanese demonstrative pronouns:

Features of units	deictic		qualitative
Constituents	roots		suffixes
Morphemes	*KO-*, *SO-*, or *A-*	+	*-re*, *-ko*, *-itsu*, or *-tchi*
Semantic features	[proximal, medial, distal]		[thing, place, person, direction]

The present thesis focuses on the place-referring demonstratives *koko* 'here', *soko* 'there', and *asoko* 'over there/yonder', the qualitative feature of which is generally supposed to be [place]. I will call the second morpheme of *ko-**ko***, *so-**ko*** and *aso-**ko*** the ***–ko* suffix**.[5]

Studies of Japanese demonstratives have a long history in which the deictic root of demonstratives, *KOSOA*, has been analyzed as a three-term system of demonstratives. However, the qualitative parts of deictic expressions have not been paid much attention. The initial goal of this thesis is to clarify the semantic structures of the *–ko* suffix in terms of limited schematic patterns and to analyze the cognitive and pragmatic relationships between conceptual properties of the *–ko* suffix and the deictic contrasts of *KOSOA*. Furthermore, ascertaining the semantics of the *–ko* suffix and examining its use in discourse will help clarify differences in meanings of other qualitative suffixes of Japanese demonstratives, especially the *–re* suffix and various temporal expressions.

The main procedures for studying Japanese demonstratives in this thesis are: (i) to propose conceptual meanings for the *–ko* suffix, without relying on the semantic feature [place] as in previous literature, (ii) to consider the relationship between the conceptual meanings of the *–ko* suffix and the types of referents of *koko*, *soko* and *asoko*, (iii) to examine the combinations of the *–ko* suffix and the deictic part *KOSOA* based on various deictic contrasts, (iv) to discuss conceptual meanings of the *–re* suffix in terms of alternations between the *–ko* suffix and the *–re* suffix, which can refer to the same referential tokens in the same discourse contexts, but with different conceptualizations, and (v) to clarify how spatial meanings of the *–ko* suffix can be transferred into temporal meanings and to compare the *–ko* suffix with other TIME expressions.

[5] Although *Asoko* consists of *A-* and *-(so)ko*, I will call it the *-ko* suffix for the sake of convenience. The irregularity of the form of *asoko* will be explained in 2.3.3.1.

1.2 Main sources of data

In this thesis, I use the following three texts as main sources of data for the analysis:

Data: Texts in Japanese

1 *Wagahai wa neko dearu* 'I am a cat' written by Sooseki Natsume, which is from *Aozorabunko* 'open-air library'(electronic resources)[6]

2 *Sekai no owari to haadoboirudo wandaarando* 'Hard-boiled wonderland and the end of the world' written by Haruki Murakami, which is from *Shinchoo Bunko-no 100 satsu* (CD-ROM)[7]

3 *Taiji no sekai* 'The world of the fetus' written by Shigeo Miki, which is from Chuuoo Kooron Shinsha (paperback)

I will abbreviate the first text as CAT, the second one as WORLD, and the third one as FETUS. When other texts are used as examples, the book titles are in italics.

Regarding the sources of my data, I used two popular corpora in Japanese linguistics. The text CAT is an electronic resource from *Aozora Bunko* and can be downloaded from the Internet freely. The text WORLD is also an electronic resource, but this is taken from the CD-ROM '*Shinchoo Bunko-no 100 satsu'*. The text FETUS is published in print by *Chuukoo Shinsho*. The texts CAT and WORLD are both long novels. CAT was written in 1905 and WORLD in 1985. The text FETUS is a scientific essay written in 1983. I chose these texts for the variety of their styles and periods.

From these texts, I extracted all the *–ko* suffixed Japanese demonstratives, the numbers of which are in the following Table (1.2):

Table (1.2): The numbers of *–ko* suffixed demonstratives in the data

CAT	186
WORLD	569
FETUS	324
total	1079

[6] URL: http://www.aozora.gr.jp/

[7] I will give page numbers for all examples except those taken from electronic resources, CD-ROM and data which I construct.

The Table (1.3) shows the number of each of three spatial demonstratives. FETUS contains examples of the *A*-series such as *ano* and *are* but there are no examples of *asoko*.

Table (1.3): The number of three spatial demonstratives in the data:

	Koko	*Soko*	*Asoko*	total
CAT	98	73	15	186
WORLD	274	281	14	569
FETUS	172	152	0	324
total	544	506	29	1079

This number of data was collected in the start of the thesis.[8] Furthermore, when necessary, I will cite useful examples from other texts and Google searches[9] as well as using simple phrases and sentences based on my own native-speaker intuitions.[10]

1.3 Outline of the thesis

Chapter 2 provides the background of the thesis, summarizing features of demonstratives in languages of the world from a typological perspective and the basic characteristics of Japanese demonstratives in terms of morpho-syntactic, pragmatic and historical points of view.

Chapter 3 presents a literature review, which I will give in two large sections: one for *KOSOA*, the deictic facet of the demonstratives, and another for the *-ko* suffix, the qualitative part. There are a large number of previous studies of Japanese demonstratives, most of which have been conducted in order to clarify the meanings of *KOSOA* in different pragmatic uses. Compared with the research on *KOSOA*, studies of the qualitative parts of demonstratives in Japanese are quite limited. From these studies, I will select several significant works and extract critical observations from them.

[8] I considered that one thousand data would be adequate in the first place, since the analysis of the thesis is purely qualitative.

[9] The final date of confirming all data from Google is 20th of September 2011. The merit of using Google search is to enable us to collect examples in very diverse contexts, which are normally unseen in conversations in novels. Furthermore, data in Google research is still a type of written text but its style is close to the spoken one.

[10] All examples which I made up are judged by about ten native Japanese speakers and are in consensus.

Chapter 4 explains objectives and methodology. The thesis will adopt a cognitive approach, several key concepts of which will be introduced in this chapter.

Chapter 5 treats the semantic structure of the *–ko* suffix in its exophoric use. Firstly, meanings of the *–ko* suffix will be defined in a conceptual way using a cognitive approach. Secondly, in order to link the abstract meanings of the *–ko* suffix with its referential meanings, the chapter will discuss the relationship between the concepts of the *–ko* suffix and the deictic centre. Thirdly, the chapter will extract the relationship between conceptual meanings of the *–ko* suffix and its referential meanings in the form of *koko* 'here' as schematic patterns.

Chapter 6 examines how the *–ko* suffix can combine with *KOSOA* in terms of deictic contrasts such as DISTANCE and PERSON, with or without a speaker's awareness of hearers and physical pointing.

Chapter 7 uses the findings of previous chapters and discusses several cognitive and pragmatic issues: (i) conceptual meanings of the *–re* suffix in contrast with those of the *–ko* suffix in terms of schematic patterns of references and (ii) the relationship between temporal expressions and the *–ko* suffix as spatial demonstratives.

1.4 Summary

This chapter has presented the theme of the thesis, descriptions of the data and a summary of the organization of the chapters in the thesis. The following chapter will explain the background of the thesis in terms of ''deixis'', demonstratives cross-linguistically, and characteristics of Japanese demonstratives from morpho-syntactic, pragmatic, and historical points of view.

Chapter 2 Background

2.1 Introduction

This chapter will present the background for the analysis presented in the thesis, where I would like to use typological findings from previous research. Although many studies of demonstrative expressions are concerned with only a single or a small number of languages, there are also some comprehensive typological studies of demonstratives, such as Yoshida (1981) with 479 sample languages (including dialects), Diessel (1999) with 85, and Imai (2003) with 432 languages.[1]

In 2.2, I will provide basic information about demonstratives from cross-linguistic perspectives. This confirms spatial demonstratives as a sub-class of deictic expressions and demonstrative systems with respect to a number of demonstrative terms and semantic values such as distance- or person-oriented, and descriptive frameworks for typological comparisons.

In 2.3, I will present the main characteristics of Japanese demonstratives from morpho-syntactic, pragmatic and historical points of view in comparison with typological findings (I will detail semantic aspects of *KOSOA* and the *–ko* suffix in Chapter 3).

[1] Yoshida is an anthropologist and influenced by Edward T. Hall's works such as *Hidden Dimension* (1966) and *Proxemics* (1968). Diessel provided Imai with his personal database. Additionally, cross-linguistic analyses of demonstratives are conducted in terms of ''definiteness'' in Lyons (1999) and ''pronouns'' in Shankara Bhat (2004).

2.2 Demonstratives

2.2.1 Spatial deixis and spatial demonstratives

From semantic and pragmatic perspectives, demonstratives pertain to **deixis**.[2] The term ‘‘deictics’’ or ‘‘deixis’’ comes from a Greek word meaning ‘pointing’ or ‘indicating’ (Lyons 1977:636); deixis is a group of expressions, interpretations of which are variable in [person], [place] or [time], according to the current speech situations. For example, deictic expressions such as *I, you, this, that, now,* and *yesterday* can be used to refer to anyone, anything and any time dependent on a particular context. Among them, demonstratives are regarded as ‘‘**spatial deixis**’’, because their referents are determined by the relative distance of an object, location or person vis-à-vis the **deictic centre** (Diessel 1999:36).[3] The deictic centre is one of the important notions in understanding deixis and refers to the zero point of speech situations, called ‘‘origo’’. It is derived from the Latin word ‘origin’, and consists of [I, here, now] (Bühler 1990).[4]

Demonstratives, as spatial deixis, are relevant to a sense of distance such as [near] and [far], so that their central property is basically considered to be DISTANCE.[5] *Koko, soko* and *asoko* in Japanese are nominated as **spatial demonstratives** by reason of the semantic property [place].[6] I will illustrate the classification related with the main topics in the thesis as follows:[7]

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[2] ‘‘Deixis’’ is used in a narrow sense in terminology such as ‘‘deictic use’’ and ‘‘non-deictic use’’, where ‘‘deixis’’ is used in contrast to ‘‘anaphoric use’’. However, I will utilize ‘‘deixis’’ as a wide-ranging cover term, as in Crystal (1997). I will employ different terms for the pragmatic uses later.

[3] In the same manner, deictic expressions such as *I, you, he* and *she* are called ‘‘personal deixis’’, *now* and *then* are ‘‘temporal deixis’’ and honorific expressions are ‘‘social deixis’’(Lyons 1977, Fillmore 1982 and Levinson 1983)

[4] From a typological point of view, Frawley (1992:275-283) summarizes that the universal core of all deictic expressions consists of the ‘‘reference point’’, ‘‘remoteness’’, and ‘‘direction’’ and the canonical deictic anchor is very narrowly defined as the *speaker in the here-and-now*. I will detail the deictic centre in 5.3.2 and the difference between the reference point and the deictic centre in 5.3.3.

[5] Note that not all demonstrative expressions always possess DISTANCE; there are instances of demonstratives without DISTANCE called ‘‘distance neutral’’ (Diessel 1999, 2005, 2006). I will discuss this phenomenon in 6.2.1.

[6] Some researchers use ‘‘spatial demonstratives’’ as a basic cover term for the entire spatial deixis (Anderson and Keenan 1985 and Wu 2004). For example, *this* and *here* in English are introduced as spatial demonstratives and subcategorized as ‘‘nominal’’ and ‘‘local adverbial’’ in terms of grammatical distinctions. This kind of treatment is popular and is considered to be standardized (Dixon 2003 and 2009). However, the term spatial deixis can also include verbs such as *come* and *go*, and there are some cases in Japanese in which place-referring demonstratives and thing-referring demonstratives are realized in the same type of grammatical system as pronouns, so that I will use the term ‘‘spatial demonstratives’’ only for demonstratives related to [place].

[7] Concerning deixis in Japanese, see Andoo (1986) and Koizumi (2001).

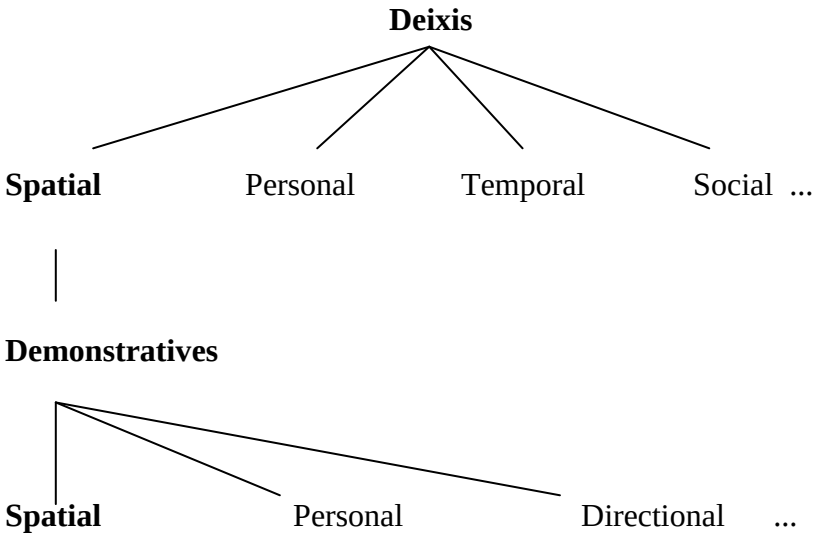


Figure (2.1): The main topics of this thesis

In Figure (2.1), although the class ‘‘personal’’ can be observed under both Deixis and Demonstratives, they differ from each other in the following aspects: personal demonstratives such as *koitsu* ‘this guy’ and *soitsu* ‘that guy’ in Japanese need the concept DISTANCE to refer to the person, whereas personal deictic expressions such as *watashi* ‘I’ and *kimi* ‘you’ do not need the semantic feature [near] or [far].[8]

The morphology of Japanese demonstratives reflects two independent conceptions: pragmatic and semantic.[9] The deictic parts of Japanese *KOSOA* demonstratives play a role relevant to **identifiability** (pragmatic conception), which points out how participants of the speech event/situation identify referents in terms of deictic contrasts such as [near] or [far]. [10] On the other hand, the qualitative parts are related to **categorization** (semantic conception),[11] which indicates how a speaker classifies entities such as [thing] or [place]. In other words, to use demonstratives is to categorize a referent and identify it in terms of its relative distance from the deictic centre.

[8] There are many variations of personal pronouns which are derived from demonstratives, e.g. the classical forms, *kokomoto* for ‘I’ and *sokomoto* for ‘you’, may have originally had deictic properties [near a speaker] or [far from a speaker], but such usages are lost in Modern Japanese.
[9] I will explain pragmatic and semantic conceptions in more detail in 5.1.
[10] Concerning the notion ‘‘identifiability’’, which is an essential feature of definiteness and includes ‘‘familiarity’’, ‘‘uniqueness’’ and ‘‘inclusiveness’’, see Christophersen (1939), Hawkins (1978), Lambrecht (1994), and Lyons (1999).
[11] ‘‘Categorization’’ is one of main concepts for the cognitive approach (Taylor 2003), and it will be detailed in 4.3.2.

2.2.2 Typological perspectives of demonstratives

In this section, I will summarize the cross-linguistic point of view of demonstratives with respect to (i) the relationship between demonstrative systems and semantic values and (ii) descriptive frameworks.

2.2.2.1 Demonstrative systems and semantic values

Demonstrative systems are organized by a number of properties, which are based on the relative distance between the referent and the deictic centre (Anderson and Keenan 1985 and Diessel 1999). The relative distance creates contrasts in demonstrative systems, e.g., [proximal] and [distal] with respect to the speaker in the simple distance contrast and the proximity of the hearer in the person-contrast. Minimal systems of demonstratives can be one-term systems, in which only a single item is presupposed without any contrast of distance.[12] Systems with more than four-terms can express various semantic values such as [± visible], [± elevation], downhill, upriver, etc.

As a general observation, two-term systems such as seen in English *this*, *that*, *here* and *there*, are a major class within languages of the world (Yoshida 1981, Diessel 1999, 2005, and Bhat 2004). Look at one more example from Chinese.

The root forms of Chinese demonstratives (Wu 2004:4-5)
zhe: used to point at a relatively close person or thing
na: used to point at a relatively remote person or thing

The root forms of Chinese demonstratives can be bound with other suffixes such as *–li* 'location' and *–huir* 'time'. Prototypically, the deictic contrast of two-term systems is considered to be [±proximity].

Concerning three-term systems of demonstratives, there are two major types of distinctions: distance-oriented and person-oriented (Anderson and Keenan 1985). For example, Spanish demonstratives are classified as distance-oriented as seen in the following:

[12] A lack of commitment to distance is an important factor for the combination between *KOSOA* and the *–ko* suffix in Japanese demonstratives. I will discuss this in 6.2.1 with examples of one-term systems.

Singular/feminine forms of Spanish demonstratives (Kattan-Ibarra and Pountain 2003:40-1)

esta: relating to me, near to me

esa: relating to us, nearby

aquella: relating to neither of us, remote

Spanish demonstratives have 15 distinctive forms according to gender and number; they can function as both adjectives and pronouns. The type of demonstratives illustrated by the example of Spanish is classified as distance-oriented, because the middle term of deictic distinctions, [medial], represents a distance from the speaker between that of [near] and [far].

On the other hand, the person-oriented three-term system can be seen in Maori demonstrative pronouns (Bauer et al 1993:380-1) such as *nei* [near speaker], *naa* [near hearer] and *raa* [distant]. Here the middle term indicates [proximate to addressee], in contrast to [proximate to speaker] and [distal from both speaker and hearer]. Let us look at Korean for another instance of the person-oriented system.

The root forms of Korean demonstratives (Sohn 1994:294-5)

i: used to refer to something close to or in contact with the speaker

ku: used to refer to something relatively close to or in contact with the addressee

ce: used to refer to something close to neither

Korean demonstratives are always determiners and form paradigms with defective nouns such as *kes* ‘thing/fact’, *eki* ‘place’ and *ttay* ‘time’. Japanese demonstratives also form a three-term system, but, whether they are distance-oriented or person-oriented has been contested for a long time, as outlined in the literature review 3.2.1.

Systems of more than three terms possess more elaborate semantic values such as [visibility] and [verticality], and geographic elements such as [up hill] and [down river]. A good sample exists among demonstratives in Toqabaqita, which is an Austronesian language spoken at the north-western tip of the island of Malaita in the Solomon Islands (Lichtenberk 2008). Let us look at two sets of locative demonstrative adverbs in Toqabaqita, where I omit several phonological variations for clarity of presentation.

Table (2.1): Locative demonstrative adverbs in Toqabaqita (modified from Lichtenberk 2008:632)

Presentative adverbs	General locative adverbs	
neqe		speaker-proximal
nena		addressee-proximal
lakoqo	*lakoo*	distal, non-elevational
loqo	*loori*	distal and higher than deictic centre
fuqu	*fuuri*	distal and lower than deictic centre

According to Lichtenberk, the semantic difference between presentative adverbs and general locative adverbs is that presentative demonstrative adverbs are used when the entity in question is visible at that location and can be pointed at, while general locative demonstrative adverbs are not used to point to the referent, regardless of whether the entity is visible or not.[13] That is, presentative demonstrative adverbs would be [+visible] and [+pointing] and general locative demonstrative adverbs would be [±visible] and [-pointing]. In addition to [proximity] of a speaker and a hearer,[14] there are further semantic divisions in [distal], which can be separated in terms of [verticality] marked as [higher] or [lower] than the deictic centre.

Among other languages Ainu, an indigenous language in Japan, has unique semantic distinctions, reported by Tamura (2000). Ainu has three noun-modifying demonstratives as follows:

Noun modifying demonstratives in Ainu (Tamura 2000:261)

Tan, emphatic form *Tapan*. Expresses something that is present, visible, a new topic of conversation, or located where the conversation is taking place: 'this, here'

Taa. Something that is in the immediate vicinity of the speaker: 'this, here'

Toan. Separated from oneself: 'that, there'

[13] The relationship between 'pointing' and 'visibility' is also shown in Japanese demonstratives and can affect types of deictic contrasts, which I will deal with in 6.3.3.2.

[14] Concerning speaker's proximity, Lichtenberk (2008:604) uses the notion of the speaker's ''sphere'': ''relative physical proximity to the speaker, part-whole relations with the speaker as the whole, including body parts, body liquids, bodily excretions/secretions; the speaker's location or an area that includes the speaker's location; a state of affairs characterized by the speaker's involvement; and the time of the speech act, time that includes the time of the speech act, or time that is proximal to the time of the speech act.''

Compared with Toqabaqita which has three distinctions in [distal], Ainu has two distinctions in [proximity] to the speaker. These examples indicate that there are various semantic distinctions that can be made, even in the value of distance.

Concerning diachronic aspects, there are certain tendencies of change that have been described for demonstrative systems. For example, the Slavic demonstrative root called the *–t* form used in languages such as Russian, Czech, and Bosnian/Croatian/Serbian was originally a two-term system, but is now a one-term system, having lost a semantic contrast relating to proximity (Sussex and Cubberley 2006:270-1). Lyons (1999:110) remarks that the two-term systems of demonstratives in Romance languages such as Italian and French can be considered to be the reduction of the three-term system, in Latin, and the same kind of process has occurred in Germanic languages such as spoken German, and English as well.

In Japanese, many Ryukyu dialects including those of the Okinawa and Amami regions are reported to be in the process of changing from three- to two-term systems (Uchima 1987). In the proto-language of the Ryukyu dialects, *KOOA* is hypothesized to be the equivalent of *KOSOA* in standard Japanese demonstrative roots (Nakamoto 1983:183). In modern Ryukyu dialects, Uchima (1987) remarks that the *KO*- and *O*-series are losing their deictic contrast and are used with the same meaning [proximity] in opposition to the *A*-series [distal]. Let us look at their phonetic representations (Uchima 1987).

Demonstratives of Ryukyu dialects of Japanese:
The *KO*-series: [Φuri] ‘this’
The *O*-series: [ʔuri] ‘this’
The *A*-series: [ʔari] ‘that’

Concerning phonetic assimilations, in some regions, the [ʔuri] of the *O*-series becomes [Φuri] of the *KO*-series and in others, [Φuri] becomes [ʔuri].

2.2.2.2 Descriptive frameworks

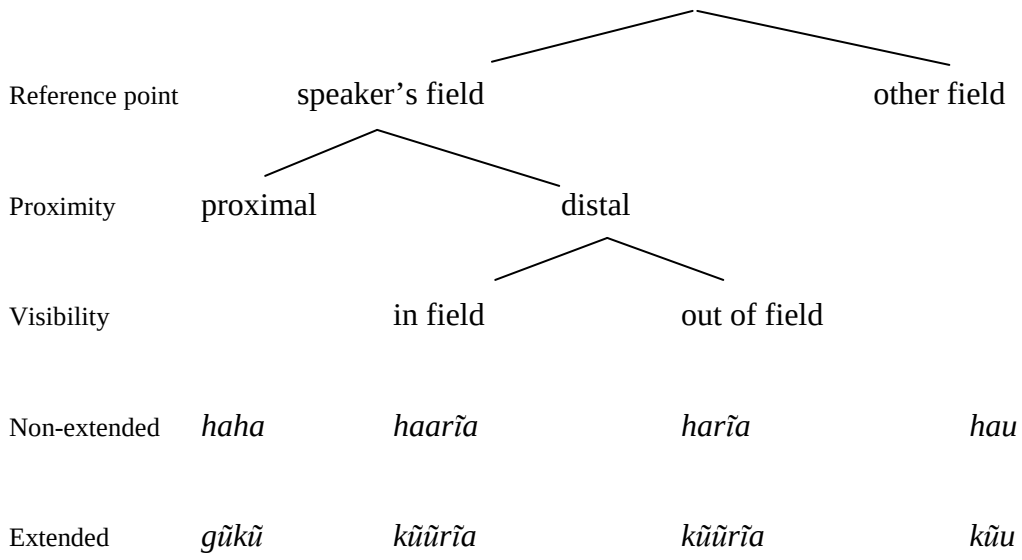
Several different ways of describing demonstratives from cross-linguistic perspectives have been proposed. Previous typological analyses of demonstratives such as Yoshida (1981), Diessel (1999) and Imai (2003) exploit reference grammars of a range of languages; however,

because they are conducted based on methodological and descriptive principles, and not all reference grammars have the same credibility, some questions about data always remain.

In order to solve the above problems, several descriptive frameworks have been proposed and tested on a range of languages. For example, Denny (1978) presents variations of general descriptions of lexical structures. Let us observe a sample model, where Denny takes Kikuyu (Niger–Kordofanian in Kenya). Kikuyu has four semantic classes:[15] (i) the location of the deictic centre, (ii) [±proximity], (iii) [±visibility] and (iv) [±extended] (some of the terms used by Frawley 1992:289).

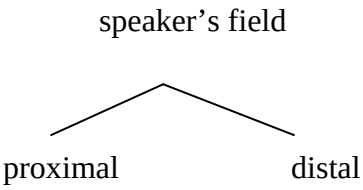
Kikuyu sets a reference point as a deictic centre, which is either a speaker or others including the addressee's field. If the deictic centre is the speaker's field, it should be marked with [proximal] or [distal]. If a location is [distal], it should be marked as visible or invisible and a typical case of [visible] is where a location can be seen and pointed to. Finally, all locations can be distinguished in terms of an area of space [extended] or a spot of space [non-extended]. Let us look at the following tree of semantic values in Kikuyu.

The Kikuyu spatial deictic system (modified from Denny 1978:74)



This tree model is one possibility for illustrating demonstrative systems and semantic values at the same time. English for example would be described in a much simpler way by the sub-tree:

[15] Denny mentions that most semantic values in Kikuyu can also be found in Eskimo.



Compared with Denny's model, which describes deictic expressions as a system, Fillmore (1982b) submits a model for an individual item in terms of Morphology (the analysis of the morphological composition of the form), Syntax (the syntactic character of the demonstrative form), Distance Feature, Combining Features, and Usage Notes. Demonstratives occur as sentential or presentatives marked by Se[_(NP)], pronouns NP[_], determiners NP[_N], locatives, Lo[_], goal Go[_], source So[_], and manner Ma[_]. Look at the following descriptions (Fillmore 1982b:56-7).

HITHER (English)
Morphology: (*h-* common in Proximal forms; *-ither* common in Goal forms)
Syntax: Go[_]
Distance: [+Proximal]
Combining Features: NA
Usage Notes: obsolescent

ACHIRA (Japanese)
Morphology: *a-* is [Distal]; *-chira* is Go[_]
Syntax: Go[_]
Distance: [Distal]
Combining Features: NA
Usage Notes: usable as Lo[_] in polite speech

KIUNGA (Inuktitut Eskimo)
Morphology: *ki-*, external to a bounded area; *-unga* Go[_]
Syntax: Go[_]
Distance: [-proximal]
Combining Features: [Exterior], taken from a five-way contrast for [-proximal] forms, translated as 'up there', 'in there', 'out there' and 'over there'
Usage Notes: Speaker must be inside the bounded area which the Figure comes to be outside.

Finally, Dixon (2003) proposes the following set of questions to be addressed when investigating demonstratives in a language:

> Four major suggestions in Dixon (2003:104-5):
> A. Does the language have (a) nominal; (b) local adverbial; (c) verbal types of demonstrative? Are there any other types of demonstratives?
> B. Does the language have (i) definite article; (ii) the third person pronoun; (iii) other related items?
> C. What are the functions of each of the types of demonstrative?
> D. Describe the parameters of reference for each type of demonstrative.
>
> (Each heading has several sub-questions for more detailed analysis.)

Japanese includes a wealth of examples of demonstratives which can answer all the questions proposed by Dixon (2003). In the following sections, I will present some basic issues and ideas concerning syntactic, pragmatic and historical aspects of Japanese demonstratives.

2.3 General observations on Japanese demonstratives

2.3.1 Syntactic aspects

Let us first confirm the basics of the demonstrative system in Japanese. In terms of syntactic categories, Japanese demonstratives have three different categories: pronouns, determiners, and adverbials.[16] Each demonstrative is constructed of two morphemes, which are the root *KO-*, *SO-*, or *A-* and various suffixes. We can specify these systems in the following paradigm (Sakuma 1951 and Kuno 1973).

[16] Concerning syntactic categories, there are many discussions in Japanese linguistics (Kuno 1973, Nitta 1997 and Uehara 1998).

Table (2.2): Paradigm of the *KO*-, *SO*-, and *A*-series

	***KO*-series**	***SO*-series**	***A*-series**
Pronouns	*kore* 'this one'	*sore* 'that one'	*are* 'that one there'
	koitsu 'this guy'	*soitsu* 'that guy'	*aitsu* 'that guy there'
	koko 'this place'	*soko* 'that place'	*asoko* 'that place over there'
	kotchi 'this way'	*sotchi* 'that way'	*atchi* 'that way over there'
Determiners	*kono* '(of) this'	*sono* '(of) that'	*ano* '(of) that over there'
	konna 'like this'	*sonna* 'like that'	*anna* 'like that over there'
Adverbials	*koo* 'in this way'	*soo* 'in that way'	*aa* 'in that way there'

It is suggested that the paradigm of modern Japanese demonstratives seen in Table (2.2) occurred in its current form after 1600 (Hashimoto 1966). I will present diachronic aspects of the system later.

We cannot recognize definite articles in Japanese as a distinct formal category but demonstrative determiners can function as markers of definiteness. For example, in introducing a non-perceptible reference in discourse, Japanese has several options such as a bare noun *neko* 'cat', *aru neko* 'a cat', *ano neko* 'the/that cat' and noun with modifier *gakkoo no neko* 'school cat'.[17] If a speaker marks (in)definiteness explicitly, s/he can use *aru* as an indefinite marker or *ano* as a definite marker. Otherwise, bare NPs are acceptable in prototypical situations. I will illustrate textually functioning definite markers such as zero, *kono* 'this' and *sono* 'that' in 3.2.3.2 and a deictic contrast related to definiteness in *soko* 'a place' and *asoko* 'that place' in 6.3.1.2.

I will present the relationship between demonstratives and personal pronouns in the section concerning diachronic aspects, because Japanese personal pronouns are historically related to demonstratives in complex ways. Here, I will simply list several characteristics of personal pronouns in Japanese in comparison with English. These are: (i) there is no syntactic obligation for using personal pronouns for tracking antecedents (ellipsis generally occurs

[17] For non-perceptible reference in the first mention, the *KO*- and *SO*-series are never available in any contexts except in clauses of direct speech. It is generally pointed out that, in languages which lack a productive means of signalling definite versus indefinite, often either the numeral 'one' or the demonstrative will come to encode the difference and the demonstrative that tends to be selected for this purpose tends to be the remote demonstrative (Frawley 1992:76 and Givón 1984:418). This is the case in Japanese.

(Hinds 1986),[18] (ii) the third person pronouns can be used in the first mention of utterances when discourse participants have shared knowledge about referents and (iii) personal pronouns can be modified with adjectives and relative clauses such as in the example *yasashii kimi* 'kind you'.

2.3.2 Pragmatic aspects

Identifiability of referents has been categorized by such notions as perceptibility and linguistic function. From the typological point of view, Himmelmann (1996) and Diessel (1999) adopt four pragmatic uses of demonstratives: (i) the **exophoric use**,[19] which orients the hearer in the speech situation, (ii) the **anaphoric use**,[20] which keeps track of discourse participants, (iii) the **discourse deictic use**,[21] which refers to propositions/speech acts and links two discourse units, and (iv) the **recognitional use**,[22] which activates old knowledge that both speaker and hearer have from common experience in the past.[23]

These four pragmatic uses are frequently classified into two superordinate categories according to the purpose of the study (I will use capital letters for the superordinates). For instance, Diessel (1999:6) presents the following tree.

[18] In speech, the use of pronouns is severely restricted. For example, Japanese has various strategies for referring to the second person, especially, to superiors, such as titles *sensee* 'teacher' and kinship terms *toosan* 'father', because in Japanese the second person pronouns cannot be used to address superiors. Regarding personal pronouns, see Okamura (1972), Suzuki (1973) and Kanzaki (1994).
[19] The term ''exophoric'' is employed by Halliday and Hasan (1976). The term ''deictic use'' or ''situational use'', which is called *genba shiji* in Japanese, can also refer to the same type of uses.
[20] This is generally called *bunmyaku shiji* (Kuno 1973) and *shoozen yoohoo* (Mikami 1970) in Japanese.
[21] This is the same type of use as ''textual deixis'' in Lyons (1977).
[22] There are several similar concepts such as ''assumed familiarity'' (Prince 1981). In Japanese, it is nearly equivalent to *kannen shiji* 'notional reference' (Horiguchi 1978 and Haruki 1991) or shared knowledge in the anaphoric (Kuno 1973).
[23] Concerning how to classify the uses of demonstratives, it is too difficult to establish unified concepts (Levinson 1983). The classification of demonstrative use employed depends on the scope of analysis of demonstratives.

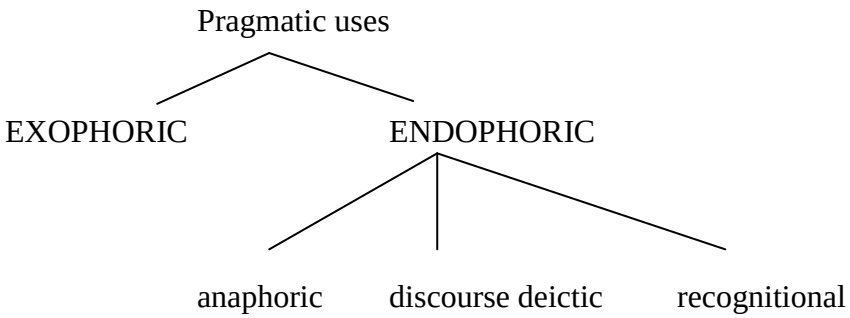


Figure (2.2): A classification of the pragmatic uses of demonstratives

The distinction is whether the demonstratives are used for reference in the surrounding situation (in the EXOPHORIC use) or not (in the ENDOPHORIC use), which is one of the frequently suggested bifurcations of the pragmatic use of demonstratives.[24]

I will illustrate each pragmatic use of spatial demonstratives using examples from the sources I presented in 1.2. Firstly, observe the exophoric use.

(1) (A speaker is standing in front of a waterfall.)

‘**Koko**	o	kuguri nukeru	wake	desu	ne’	to	watashi wa	kiite	mita.
KOko	ACC	going through reason	COP	SF	QUO	I	TOP	ask-LINK	tried

‘“Here’s where we go under, right?” I asked.’

WORLD

Koko in this example refers to the waterfall in front of the speaker, which we can abstractly rephrase as informing hearers of a referent in the speech situation. In general, referents in the exophoric use are perceptible and the speaker can point them out. Therefore, it is considered to be the basic use of demonstratives (cf. Lyons 1977 and Diessel 2006).

Next, let us look at the anaphoric use in (2), where *soko* ‘there’ refers back to the NP *bokoo* ‘the old school’ in the first sentence.

[24] Japanese generally employs the same type of binary terminology such as *genba shiji* ‘situational use’ and *bunmyaku shiji* ‘anaphoric use’.

(2) Nan juu nen burikade bokoo ni tatsu. Ichi-ichi no kioku ga
several ten year after old school LOC stand each GEN memory NOM
aru. **Soko** de kaisoosareta node
exist SOko LOC remembered because
'I came to my old school after ten years or so. Each memory came to me because I remembered it there.'
FETUS p(i)

Here, *soko* does not denote any visible place in the current speech situation; rather it indicates a particular place mentioned in the previous sentence.

The discourse deictic use also has the primary function of tracking back to the referents previously mentioned in the present discourse (Diessel 1999:100-1), but the crucial difference from the anaphoric use is that the discourse deictic use does not refer to a single entity or place. Instead, it designates a proposition or chunk of discourse units like the next example:

(3) dakara kono <sekai no owari> toyuu kimino ishiki no
therefore this the End of the World called your consciousness GEN
kaku wa kimi ga iki o hikitoru made kawaru koto naku seekakuni
core TOP you NOM pass away until change COMP not correctly
kimino ishiki no kaku toshite kinoosuru noda
your conscious GEN core as function it is
Koko made wa wakaru ne
KOko by TOP understand SF
'Your *End of the World* core consciousness will continue to function, unaffected, until you take your last breath. Do you understand this far?'
WORLD

In (3), *koko* refers back to the entire contents of the previous discourse, that is, ''Your *End of the World* core consciousness will continue to function, unaffected, until you take your last breath.''

It is worth noting that this kind of function, referring to the preceding discourse, is close to that of connectives which link two paragraphs or two discourse units.[25] Look at the usage of demonstratives generally regarded as connective.

(4) tooji no koofun wa ima mo azayakani nokotteiru.
those days GEN excitement TOP now also clearly remain
Sokode tsugi no mondai wa..
SOkode next GEN question TOP
'The excitement of those days clearly remains in my mind even now. Then, the next question is…'
FETUS (p91)

In this example, *sokode* does not have the meaning of [place] but plays a role in changing the theme of discourse such as *then*, *now* or *well* in English. The form *sokode* is considered to be one word, the formation of which is {soko + de}, a combination of the demonstrative *soko* and the locative *de*. Diessel (1999, 2006) points out that demonstratives of the discourse deictic use are a common historical source for the development of conjunctions and complementizers in the grammaticalization process. I will discuss the anaphoric use and the discourse deictic use of the *–ko* suffix in terms of temporal expressions in 7.3.8.

Finally, I will elucidate the recognitional use. Compared with other uses (the exophoric use, anaphoric use and discourse deictic), there have been few studies concerning the recognitional use.[26] In English, Diessel (1999:7) gives the following example.

(5) Do you still have **that** radio that your aunt gave you for your birthday? [D][27]

In (5), even if the radio is not perceptible in the present speech situation and not mentioned previously in the immediate discourse, the speaker can refer to the referent with the

[25] As a special case, the following example is classified as the exophoric use: ''I'm sorry. I didn't hear you. Could you repeat **that**? '' *That* in this example does not refer to the preceding proposition or content; rather it refers to a string of speech sounds that the speaker could not catch. It is called ''pure text deixis'' by Lyons (1977, 1995).
[26] Concerning *that* in the recognitional use, see Lakoff (1974), who uses the term ''emphatic use'' and Halliday and Hasan (1976) and Strauss (1993), who use the term ''non-phoric''. Kamio and Thomas (1999) provide interesting explanations about the difference between *the* and *that* in terms of the state of knowledge of discourse participants.
[27] Examples taken from previous research will be marked by the authors' initials in brackets e.g. [D] for Diessel.

demonstrative *that*, which can signal the hearer to identify the referent with specific knowledge shared with the speaker.

In Japanese, the *A*-series of *KOSOA* in demonstratives can exclusively apply to the recognitional use, so that it has often become a major topic for *KOSOA* studies in contrast with the *SO*-series in the anaphoric use (Kuno 1973, Sakata 1992, Horiguchi 1992, Haruki 1991, Kinsui and Takubo 1992a, and Iori 2007). Observe the following example.

(6) ‘Seken ni wa suupaamaaketto toyuu mono ga atte
world LOC TOP supermarket called thing NOM exist-LINK
asoko wa kuchi-ga-kiken demo kaimono dekiru’
ASOko TOP speech-handicapped even shopping can
‘They’ve got supermarkets out there where you can shop, even if you cannot say a word.’
WORLD

In (6), *asoko* refers to supermarkets in the recognitional use, which is based on background knowledge concerning supermarkets shared by the speaker and the hearer. One of the important features in the recognitional use is that the entity a speaker refers to is typically shared with hearers, but this is not always necessary. The difference between the anaphoric use and the recognitional use in Japanese demonstratives clearly appears in alternations between the *A*-series and the *SO*-series in the same syntactic environment. I will present this point in the literature review in 3.2.2.

Table (2.3) shows the distribution of pragmatic uses in the data of each text, where Exo stands for the exophoric use, Ana for the anaphoric use, Dis for the discourse deictic use and Rec for the recognitional use respectively.

Table (2.3): Distributions of pragmatic uses of spatial demonstratives in the data (% inside the bracket):

	Exo	Ana	Dis	Rec	Idiom	total
CAT	94(51)	20(11)	54(29)	12(6)	6(3)	186
WORLD	292(51)	236(41)	27(4)	12(2)	2(0.3)	569
FETUS	92(28)	159(49)	73(23)	0	0	324
Total	478(44)	415(38)	154(14)	24(2)	8(0.7)	1079

Although FETUS contains no examples of *asoko* as seen in Table (1.3) and no recognitional use in Table (2.3), FETUS includes many other expressions with the *A*-series and the recognitional use, forms of which are *ano* NP such as *ano toshi* 'that year' and *ano aji* 'that taste'. Idioms which contain demonstratives can be seen in the data as follows:

Doko-soko	'such and such a place'
Soko-kashiko	'everywhere'
Sonjo-sokora	'on every corner'
Soko-e-iku-to	'in that respect/whereas'

Idiomatic expressions composed of demonstratives are diverse, e.g. *are-kore* (one thing or another) and *achi-kochi* (this way and that).[28]

The discussion about the semantic structure of the *–ko* suffix will mainly be based on 478 examples in the exophoric use. Some examples from other uses will be utilized in comparison with the exophoric use, if necessary.

Besides that in Figure (2.2), there is another well employed binary classification of the pragmatic uses of demonstratives, which is founded on whether referents can be identified by extra-linguistic information or not. In this case, one group with language-external information includes the exophoric and recognitional uses, while the other with language-internal information includes the anaphoric and discourse deictic uses, as follows:

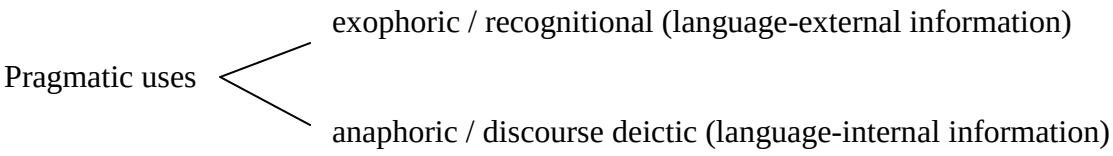


Figure (2.3): Another classification of pragmatic uses of demonstratives

The classification in Figure (2.3) is adopted by Halliday and Hasan (1976), Kinsui and Takubo (1992a), and Iori (2007).[29] The difference between Figures (2.2) and (2.3) depends on how the recognitional use is classified.

[28] Concerning complex idiomatic expressions containing demonstratives, see Ro (2004).

[29] Diessel regards Halliday and Hasan (1976) as the model in Figure (2.2) but their analysis emphasizes textual aspects, where the recognitional and the exophoric uses are considered as the same function. Kinsui and Takubo (1992a) hypothesize that the use of *KOSOA* is based on direct experience such as the exophoric use and

This study will concentrate on Japanese spatial demonstratives in the exophoric use. However, when a continuum between the exophoric and recognitional uses matters in terms of the deictic contrast, I will adopt the classification in Figure (2.3) using the term EXOPHORIC use for all uses with language-external information in 6.3.1.2. Several temporal expressions of the *–ko* suffix in the ENDOPHORIC use will be discussed in 7.3.8.

2.3.3 Diachronic aspects

2.3.3.1 Development of *KOSOA*

In this section, I will sketch Japanese demonstratives from a historical point of view. Although the analysis of the thesis will focus on synchronic descriptions of modern Japanese demonstratives, it is appropriate to remark on diachronic changes in *KOSOA* which contribute to our understanding of how to extend the meanings and the network of meanings in spatial demonstratives.

There are several important historical studies of Japanese demonstratives (Yamada 1954 (1913), Hamada 1946, Hashimoto 1966, 1982, and Ri 2002). Based on their findings, I will summarize the difference between modern and pre-modern demonstratives in Japanese and the forms and meanings of the *–ko* suffix below.[30]

According to previous research, it is assumed that there were only two-way systems of demonstratives such as the *KO*- and *SO*-series before AD 700, which could be used as the free forms *ko* and *so* in addition to their use as a morpheme of the deictic root. Instead of the *A*-series in Modern Japanese, the *KA*-series is frequently found in the texts after around AD 900. It is worth noting that, even after the *KA*-series emerged in the forms of *kare* and *kano*, a spatial demonstrative was still missing with the *KA*-series. In a later stage, the *KA*-series had ***kashiko*** corresponding to *koko* and *soko*, instead of ***kako*** as the expected formation of [the deictic root + *–ko* suffix].[31]

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recognitional and indirect experience such as the anaphoric and discourse deictic. Concerning information sources of reference, see Givón (1979) and Chafe (1994).

[30] There are only limited materials available for historical research. The oldest resources of Japanese texts were written or edited around AD 700, which are mainly in the style of poems such as *Manyooshuu* (Manyo anthology).

[31] The form of *kashiko* is thought to have been composed of two morphemes [*ka*- and *–shiko*]. The *–shiko* morpheme would have originated from the word *shiko*, and have been used for the same meaning as *soko*. The semantic value [-proximity] of the morpheme *KA*- and the meaning [-perceptibility] of *soko* would have been

Furthermore, the pragmatic uses of demonstratives historically are different from these in Modern Japanese. For instance, the *KO*-series is generally used for the exophoric use and the *SO*-series for the anaphoric use. This is a very interesting point, because it is often hypothesized that, if demonstratives in a language display a two-way system, it is anticipated that they will have distance contrast [± proximal] (Anderson and Keenan 1985 and Diessel 1999, 2004). However, demonstratives in Pre-modern Japanese are contrasted by perceptibility i.e. the *KO*-series for referents in front of the speaker and the *SO*-series for referents that are out of sight (Hashimoto 1966 and Ri 2002).

The development of the contemporary *KOSOA* system is hypothesized by Hashimoto (1966, 1982) and Ri (2004). I will summarize their proposals as follows:

In the first stage, the *KO*- and *SO*-series existed and the semantic distinction between them was [±perceptibility].

In the second stage, the *KA*-series emerged from the *KO*-series by means of a vowel change (K[o]⟶ K[a]) and the semantic distinction between them was [±proximity].

In the third stage, the *SO*-series acquired the exophoric use, where the *KO*-series for the first person was distinguished from the *SO*- and *KA*-series for the non-first person. At the same time, the *A*-series started to be used in the same contexts as the *KA*-series, where it is hypothesized that the deictic root *A* came from dropping consonant *k* of *ka*

In the fourth stage, the *SO*- and *KA*-/*A*-series separated in terms of the second person for the *SO*-series and the third person for the *KA*/*A*-series.

In the final stage, the *KOSOA* paradigm was established after around AD 1750 in nearly the same form as modern Japanese demonstratives.

combined (Yamada 1954:79). However, the word *shiko* has never been found in any text. Hashimoto (1982) also remarks that the *–shi-* morpheme of *ka-shi-ko* can be related to the *SO*-series.

2.3.3.2 Development of personal pronouns

In this section, I will outline a relationship between demonstratives and personal pronouns in Japanese, because, from a cross-linguistic perspective, demonstratives provide a historical source for various grammatical items including third person pronouns, connectives, and definite articles (Diessel 1999:115-119). Concerning the relationship between demonstratives and personal pronouns, Givón (1984:353) proposes a diachronic cline:

demonstrative pronoun > third person pronoun > clitic pronoun > verb agreement.

Third person pronouns can be derived from de-stressed anaphoric demonstratives, the functions of which may also change from emphatic and contrastive discourse topics to all persisting topics.

In many languages, personal pronouns can mark social properties of speech act participants such as honorifics, which is called ‘‘social deixis’’ (Fillmore 1997:112). For example, the way of using the second person pronouns *tu* (informal ‘you’) or *vous* (formal ‘you’) in French depends on various levels of social relationship, where mutual choices of forms by speech participants can show superiority, inferiority, equality or solidarity (Brown and Gilman 1972:259).

Japanese personal pronouns are very sensitive to social deixis in terms of gender, social status and age. Firstly, let us illustrate representative personal pronoun forms in Modern Japanese, where the highlighted forms are derived from demonstratives (modified from Shibatani (1990:371)).

Table (2.4): Gender and politeness in Japanese pronominal forms

	Formal ⟷			Informal
1st Person				
Male	*watakushi*	*watashi*	*boku*	*ore*
Female	*watakushi*	*watashi*		*atashi*
2nd Person				
Male	***anata***		*kimi*	*omae*
Female	***anata***			*anta*
3rd person				
	kare ‘he’ / ***kanojo*** ‘she’			

In Modern Japanese, we can use the following demonstrative pronouns to refer to people, although these demonstratives are not always replaced with personal pronouns in every context:

Table (2.5): Personal reference by demonstratives

	1st person	2nd person	3rd person
Polite	*kochira*	*sochira*	*achira*
Plain	*kotchi*	*sotchi*	*atchi*
Derogatory			*koitsu /soitsu /aitsu*

The *–tchi* suffix is basically used for [direction] and the *–chira* suffix is morphologically composed of the *–tchi* suffix and the *–ra* suffix (plural marking). This shows that demonstratives as spatial deixis can also express social deixis. In order to refer to persons, using [direction] in demonstratives, instead of personal pronouns, is an instance of the politeness strategy such as ‘‘Be indirect’’ (Brown and Levinson 1987).

The above forms are the major ones which are used synchronically; however, from a diachronic perspective, numerous pronouns have been created and lost, sometimes within a short period of time. Barke and Uehara (2005) confirm that second person pronouns have been realized in 140 forms (72 forms excluding phonological variants) since the Nara period (AD 710-794). They observe that none of the total 72 forms surveyed showed any increase in politeness, but rather showed either a reduction in politeness or fell out of use within the timeframe of one historical era, e.g. *kimi* (originally for the emperor but now from the superior to the inferior).

Regarding third person pronouns, in Modern Japanese *kanojo* ‘she’ is the newest form, which was introduced in the Meiji period (after 1868) in order to render various European languages into Japanese. The form *kare* had already been used for translating Chinese *ta* (third person pronoun).[32] The forms *kare* and *kanojo* are basically exploited in written texts, while forms such as *kono/sono/ano kata* ‘this/that person’ are used in speech.

[32] Concerning how the third person pronoun evolved in Pre-modern Japanese, Ri (2002) proposes that the first distinctions among personal pronouns were the first person and the non-first person. There are many examples in which the so-called second and third person pronouns overlapped to refer to both ‘you’ and ‘s/he’ respectively. He points out the same kind of historical process in the development of personal pronouns and demonstratives, where non-first person pronouns separated into the second and third person pronouns and the *SO*- and *A*-series of demonstratives diverged from the use for non-first person.

As seen in the diachronic development of *KOSOA*, *kare* of the *KA*-series is the classical form of *are* of the *A*-series and *anata* in the second person pronoun is also the classic form for 'yonder'. That is, the second and third personal pronouns in Modern Japanese are derived from classical forms of demonstrative pronouns.

Finally, I will present a correlation between demonstratives and personal pronouns in terms of discourse participants. Sakuma (1951:36) indicates that representative forms of pre-modern personal pronouns share the same *–re* suffix with Modern Japanese demonstratives as can be seen in Table (2.6):

Table (2.6): Correlation between personal and demonstrative pronouns

	Speaker	Hearer	neither speaker nor hearer	Indefinite
Person	*ware*	*nare*	NA	*tare*
Thing	*kore*	*sore*	*are*	*dore*

In classical Japanese forms, 1st and 2nd person pronouns were also represented with the *–re* suffix as in *WA-re* and *NA-re*.[33] Although Sakuma does not include the form *kare*, it is interesting that only *kare* for 3rd person, derived from the classical demonstrative, is still alive in the Modern Japanese pronominal system for persons. The fact that the *–re* suffix was used for [person] and [thing] is very important in comparison with the *–ko* suffix, which I will discuss in 7.2.

2.4 Summary

This chapter has presented background information for studying demonstratives from two essential points of view: firstly, the perspective of typological findings, where systems of demonstratives and semantic values of various languages are canvassed, and secondly, Japanese demonstratives in terms of morpho-syntactic paradigms, pragmatic uses and historical changes. A literature review of semantics, which has been omitted here, will be the focus of the next chapter.

[33] The first person root *WA-* remains in the form of ***WA****tashi* 'I' in Modern Japanese. *WA* and *NA* were originally used as free forms, as were *KO*, *SO*, and *KA*.

Chapter 3 Literature review of Japanese demonstratives

3.1 Introduction

The purpose of this chapter is to present previous methods of investigating spatial demonstratives. Studies of the deictic roots *KOSOA* in Japanese demonstratives have been conducted in diverse ways,[1] while the qualitative suffixes have been examined by only a few researchers. Therefore, I will divide the literature review of Japanese demonstratives into two sections.

In 3.2, studies of *KOSOA* will be summarized in terms of standard concepts for analysing characteristics of demonstratives such as ‘‘distance-oriented’’ or ‘‘person-oriented’’ in the exophoric use, ‘‘shared knowledge’’ in the recognitional use and ‘‘vividness effects’’ in the anaphoric use. Each concept, which has been further refined in previous studies, is essential to understanding Japanese demonstratives.

In 3.3, previous research into the *–ko* suffix will be summarized from three perspectives: (i) dictionary definitions (Morita 1989), (ii) meanings in the exophoric use (Takahashi and Suzuki 1989) and (iii) conceptual interpretations in the anaphoric use (Takeda 1994). The past analyses of the *–ko* suffix are insightful but have not provided systematic explanations because of the lack of a framework for determining abstract semantic properties of the *–ko* suffix. Finally, I will point out several common problems in the previous studies and clarify issues to be solved in the following chapters.

[1] Concerning previous studies of Japanese demonstratives, the bibliography in the collected articles in Kinsui and Takubo (1992) is the most comprehensive. The website of Kinsui is also useful for literature after 1992. The URL is http://www.let.osaka-u.ac.jp/~kinsui/sizisi/dembib.html.

3.2 Previous studies of the deictic roots *KOSOA* in Japanese demonstratives

Generally, studies of demonstratives in Japanese have been regarded as studies of the *KO*-, *SO*-, and *A*-series, where the focus has been on the deictic meanings of *KOSOA* and their pragmatic uses. In this section, I will outline previous arguments concerning *KOSOA* by consulting several significant works.

3.2.1 Issues related to the exophoric use

3.2.1.1 From distance-oriented to person-oriented

As often pointed out (Kinsui and Takubo 1992b), the study of Japanese demonstratives began with Sakuma's work (1951), where there are two main proposals. First of all, Sakuma (1951) extracts three morphemes *KO*-, *SO*-, and *A*- as the deictic roots of demonstratives across the syntactic categories of pronouns, adverbs, and determiners seen in Table (2.2) of the previous chapter. Before Sakuma, Japanese demonstratives were normally categorized just as a subclass of pronouns and there were only a few descriptions in the literature.[2] The reason why Japanese demonstratives came to be called *KOSOA* is based on the paradigms of *KOSOA* that Sakuma proposed.

Secondly, Sakuma redefines the characteristics of *KOSOA* for the exophoric use based on the way in which referents are influenced by the interlocutors' territory, instead of on the relative distance from the interlocutors to referents.[3] As presented in 2.2.2.1, three-term systems of demonstratives are generally classified as either distance-oriented or person-oriented: the former considers a medial category of demonstratives as ''intermediate distance from a speaker'', and the latter as ''close to a hearer''.

Before Sakuma, *KOSOA* had usually been considered from the perspective of distance as follows:

[2] Concerning studies of *KOSOA* before Sakuma (1951), see Furuta (1992) and Kinsui and Takubo (1992b).
[3] It is known that Ootsuki (1889) was the first to define the *KO*-series as 'proximal', the *SO*-series as 'medial' and the *A*-series as 'distal' (Furuta 1992).

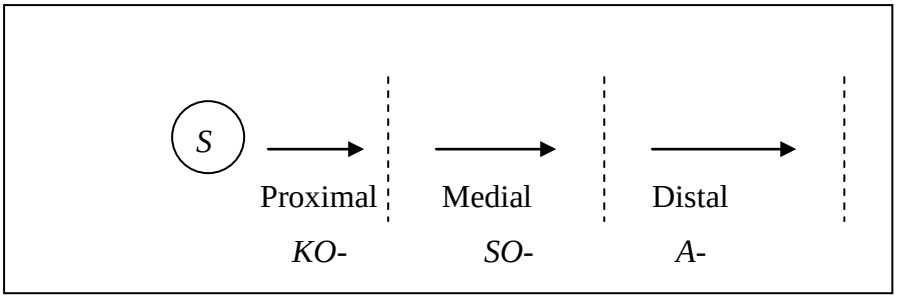


Figure (3.1): The relationship between *KOSOA* and distance

In Figure (3.1), *S* stands for a speaker, arrows indicate direction, and vertical broken lines show demarcations of distance, where the line close to the speaker marks [proximal] and, following it, [medial] and [distal] are determined by how far referents are from the speaker. That is, the definition of *KOSOA* is based on physical distance. This is a typical view of ‘‘distance-oriented’’.

Sakuma (1951:35) introduced the notion of a ‘‘hearer’’ (symbolized as *H*) in the deictic concepts used to analyze demonstratives and proposes the following idea:

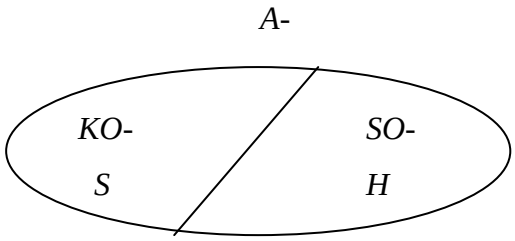


Figure (3.2): Territories of *KOSOA* in Sakuma (1951)

Sakuma’s figure emphasizes that the features of *KOSOA* are not physical distance from a speaker, but rather psychological territories of a speaker and a hearer. That is, demonstratives can be described in terms of the zone or territory within which the speaker recognizes a referent as being. If it is in the speaker’s territory, the *KO*-series should be used and if it is in the hearer’s, the *SO*-series is obligatory, and if it is outside the interlocutors’ territory, it should be expressed by the *A*-series.[4]

[4]In the development of person-oriented interpretations, Kamio (1997) proposes the Theory of Information Territory, where various linguistic phenomena including the usages of demonstratives are classified according to whose territory the information of discourse belongs to.

The crucial difference between Figures (3.1) and (3.2) appears in whether a speaker can identify a referent with or without consciousness of a hearer's presence. Let us summarize the features of *KOSOA* in the exophoric use.

Table (3.1): The change of interpretations of *KOSOA* proposed by Sakuma (1951)

	Physical Distance		Territory of Interlocutors
KO-	proximal to a speaker		speaker's territory
SO-	medial to a speaker		hearer's territory
A-	distal from a speaker		outside interlocutors' territory

With this shift of the characteristics of *KOSOA* from physical distance to psychological territory, the central issue of studies of *KOSOA* in the exophoric use becomes a matter of ''person-oriented'', as opposed to ''distance-oriented''.

3.2.1.2 Revised ''Person-oriented''

Sakuma's proposal remains influential in studying and teaching Japanese demonstratives, as one of the main explanations of the features of *KOSOA*. Based on his ideas, Japanese demonstratives are typically presented as person-oriented within typological analyses (Anderson and Keenan 1985 and Diessel 1999, 2005).[5]

However, we cannot simply say in one particular formula that demonstratives in a language are person-oriented or distance-oriented. For example, Lyons (1999:109) remarks that it is not always clear whether distance or person is the principle concept involved and some languages may mingle the two. English is also one of those languages as seen follows:

(1) ''Show me **that** (?this) letter you have in your pocket''

(2) ''Tell her to bring **that** (?this) drill she has''

[5] See 2.2.2.1.

In (1) and (2), *this* would be possible if referents are associated with the speaker in some way. For example, the letter in (1) may have already been the subject of discussion between the speaker and the hearer; and in (2) the speaker may have been previously thinking about the amazing drill that she has recently heard one of her friends has acquired. Otherwise, *that* is the appropriate demonstrative. In (1), the letter is in the possession of the hearer (second person) and in (2), it is someone not present in the discourse situation (third person) who has the drill. Lyons (1999:18-9) remarks that it would be reasonable to speak of *this* as a first-person demonstrative and *that* as a non-first-person demonstrative.[6] That is, even with English demonstratives, it is possible to relate the distance-oriented characteristic of demonstratives to the category of person.

Although Japanese demonstratives are typically considered to be person-oriented, there are some uses which are not related to the category of person. For example, the *SO*-series can denote a space close to the speaker in certain situations, instead of denoting a space in the hearer's territory (Takahashi 1992, Hattori 1992 and Sakata 1992). Let us look at the next example taken from Takahashi (1992: 41)

(3) (When a speaker confronts a hearer in the middle of a room and the speaker points to a desk behind himself, he can say)

Sono tsukue o goran. [T]

SOno desk ACC look

'Look at that desk.'

The utterance in (3) is appropriate in the current discourse context, even though the *SO*-series is used not to refer to the space around the hearer but to that behind the speaker, where the referent 'desk' is more distant from the hearer.

I also found an interesting example, in which the *SO*-series is genuinely used for the medial distance from a speaker without any reference to the hearer.

[6] In other languages, we can see the same kinds of problems about classifications; for instance, Spanish is generally classified as distance-oriented but some studies propose that Spanish is person-oriented (Jungbluth 2003).

(4) (A speaker is looking up at a wisp of smoke from a chimney at a crematorium.)

Tamashii ya shigo no sekai ga nai toshitemo kemuri wa
soul and afterlife GEN world NOM not exist even if smoke TOP
tashikani **soko** ni aru.
definitely SOko LOC exist
'Even if neither soul nor the next world exists, there is definitely a wisp of smoke there.'
Juuryoku piero (p333)

In this monologue (4), a speaker expresses the spatial referent 'where smoke is' with the *SO*-series. Previous studies consider that it is very difficult to use the *SO*-series without a hearer in a speech situation (Kinsui and Takubo 1992a:169). However, the *SO*-series in (4) is perfectly acceptable. *Koko* is also available as an alternative to *soko* in the same situation. The difference between them is that *soko* can give an impression of the smoke being slightly further away than if *koko* were used.

The above examples show that the *SO*-series is not always used to indicate the territory of the hearer: in (3), the speaker can also use it to point to a referent closer to his position than to the hearer's, and, in (4), the *SO*-series can be used even without the presence of a hearer around the referent. In order to incorporate cases in which the two interpretations ''person-oriented'' and ''distance-oriented'' conflict, the following modification of the diagram for *KOSOA* is proposed by Hattori (1992) and Sakata (1992).[7]

[7] Although Hattori comments that this use of the *SO*-series could be a variant form from a dialect in the western area of Japan, several native-speaker judgements of people from Tokyo support the acceptability of using the *SO*-series in situations like that in Figure (3.3).

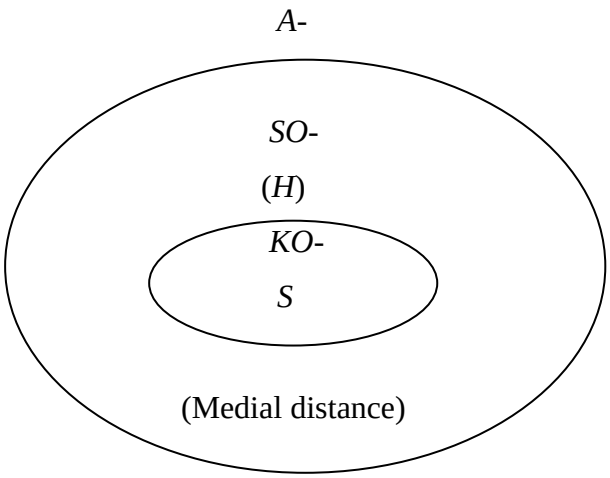


Figure (3.3): A modification of Sakuma's model

In Figure (3.3), *H* (hearer) is bracketed, and represents the possibility of a situation in which the *SO*-series can be used when the location of a hearer is irrelevant, such as that seen in (4). The territory of the *SO*-series surrounds the zone of the *KO*-series, which explains the use of the *SO*-series when a referent is behind the speaker and in the medial distance from him. This is a kind of blended model of the person-oriented model and the distance-oriented model, and is one solution to explicate the meanings of *KOSOA* in the exophoric use.

As seen in 2.3.3.1, the meaning of the *SO*-series historically developed from [±perceptibility] to [±proximity]. Regarding the semantic blending of medial distance from a speaker and closeness to a hearer, Fillmore (1982b:49) hypothesizes that it emerges from a typical language communicative situation in which a speaker and a hearer are fairly close to each other spatially and engaged in face-to-face interaction, where there is a general coincidence between being a small distance from the speaker and being close to the hearer.

There is another approach which does not accept that Japanese demonstratives have a blending property between distance- and person-oriented. This approach rejects the semantic categories [middle distance] and [near hearers]. For example, Kinsui and Takubo (1992a) indicate that there is no such property, i.e. [medial], in the first place, since it can arise only after [proximal] or [distal] have been determined. Hoji, Kinsui, Takubo and Ueyama (2003:115) propose an alternative interpretation, which describes the deictic characteristics of *KOSOA* in terms of the binary features [proximal] and [distal] as follows (I omit irrelevant parts for ease of discussion).

Table (3.2): The meanings of *KOSOA* in Hoji et al. (2003)

KO-NP is marked as [proximal]
SO-NP is neither [proximal] nor [distal]
A-NP is marked as [distal]

The importance of this table is in the formula of the *SO*-series, which is defined in a negative way such as neither [proximal] nor [distal]. Therefore, it is unnecessary to presuppose the middle distance [medial].

Furthermore, Kinsui and Takubo (1992b) remark that the notion of the hearer's territory is related to pragmatic meanings rather than to a semantic property of *KOSOA*. Therefore, they propose that the semantics of the *SO*-series should be defined without a pragmatic concept such as whether a hearer exists in the discourse or not.

With respect to semantic principles, I will not commit to determining whether Japanese demonstratives are distance-oriented or person-oriented. Instead, I will take a different approach and describe them as types of deictic contrasts based on distance or person, by means of the combinations of *KOSOA* and the conceptual properties of the *–ko* suffix, which will be discussed fully in 6.3.2.1.

3.2.2 Issues related to the recognitional use

3.2.2.1 Selective constraints between the *SO*- and *A*-series

Next, I will outline a central argument concerning differences between the *SO*- and *A*-series in discourse which does not include the notion of distance. Let us look at the generalizations put forward by Kuno (1973), which are some of the most influential explanations for the selective constraints of the *SO*- and *A*-series (I have shortened the example taken from Kuno (1973:288)). [8]

[8] Kuno's explanation is still accepted by many Japanese text books and scholars (e.g. Shibatani 1990 and Maynard 1998).

(5) X: John wa baka de komarimasu. [K]
John TOP stupid COP annoying
'I am annoyed that John is stupid.'
Y-1: (**Sono**/*Ano) hito ni mada atta koto ga arimasen.
SOno Ano person DAT yet met COM NOM not exist
'I haven't met him yet.'
Y-2: Hontooni (*sono /**ano**) hito baka de komarimasu ne.
truly SOno Ano person stupid COP annoying SF
'Yes, I'm really annoyed that he is that stupid.'

The important point of this example is that in Y-1 *sono* but not *ano* is allowed, while the reverse is true for Y-2. The noun phrases with the demonstrative determiners *sono* and *ano* in Y-1 and Y-2 refer back to *John* in the utterance of X, which means that the use in both examples looks anaphoric.

According to Kuno, the essential difference between the *SO*- and *A*-series in the anaphoric use is either whether the hearer recognizes the referent personally or not or whether the discourse participants have shared knowledge of the referent or not.[9] Kuno claims the meanings of the *SO*- and *A*-series to be as follows (Kuno 1973: 290):

> The *A*-series is used for referring to something (at a distance either in time or space) that the speaker knows both he and the hearer know personally or have shared experience in.
>
> The *SO*-series is used for referring to something that is not known personally to either the speaker or the hearer or has not been a shared experience between them.

The above statements clarify that the status of the interlocutors' knowledge determines the selection between the *SO*- and *A*-series in discourse, rather than a simple notion of distance.

Let us recall the four types of typological classifications of pragmatic uses presented in 2.3.2: the exophoric use, the anaphoric use, the recognitional use and the discourse deictic use. In terms of these categories, Kuno's generalizations can be rephrased with the statement that **the *SO*-series is used for the anaphoric use**, which keeps track of discourse participants,

[9] Concerning ''shared knowledge'' in definite reference, see Clark and Marshall (1981).

and **the *A*-series is used for the recognitional use**, which activates old knowledge that both speaker and hearer know from common experience in the past.[10]

One of the critical distinctions between the anaphoric use of the *SO*-series and the recognitional use of the *A*-series in discourse is whether or not the demonstratives can be placed in utterance-initial position or not. For example,

(6) **Are/ ***Sore wa doo shita.
Are SOre TOP how did
'What about that?'

If a speaker and a hearer share a concern, *are* can successfully evoke the same referent in both interlocutors' minds. However *sore* is never acceptable in this context unless there is an antecedent in a previous utterance. From this discourse characteristic of the *A*-series (used as the first mention and without an antecedent), the use of the *A*-series cannot be said to be the anaphoric at all.

3.2.2.2 Revised ''Shared knowledge'' of the *A*-series

There are some cases that violate Kuno's proposal, regarding the shared knowledge hypothesis of the *A*-series. Look at the next utterance discussed in Kuroda (1992:101):

(7) Kyoo Kanda de kaji ga atta yo. **Ano** kaji no koto [K]
today Kanda LOC fire NOM occurred SF Ano fire GEN matter
dakara nannin mo shinda to omoo yo.
because many people FOCUS died COM think SF
'There was a fire in Kanda today. Knowing that fire, I guess a lot of people must have died.'

In (7), using the *A*-series is correct, even though the hearer has not seen the fire and has no shared knowledge with the speaker. According to Kuno's generalization, we would predict that the speaker would have to choose the *SO*-series, but in this case it is inappropriate.

[10] In other words, the *A*-series is EXOPHORIC (language-external information) and the *SO*-series is ENDOPHORIC (language-internal information).

In order to account for such an anomaly, Discourse Management Theory (Kinsui and Takubo 1992a, 1997) provides an alternative solution, where the crucial factor for selecting the *SO*- or *A*-series is whether or not the discourse referents are founded within the speaker's direct experiences, rather than the interlocutors' shared knowledge. Based on Kuroda's observation (1992), Kinsui and Takubo (1997:753) propose the following new principle for the anaphoric use of demonstratives:

> The *A*- and *KO*-series capture an object as being in the sphere of one's direct experience.
>
> The *SO*-series captures an object as being outside of one's direct experience, conceptual knowledge in the case of anaphoric uses and other people's direct knowledge in the case of deictic uses.

A strong point of the above generalization resides in explicating the choice of *KOSOA* without relation to the hearer's status of knowledge, but where only the speaker's direct experience matters. Therefore, *ano kaji* 'that fire' in (7) can be accounted for as representing the speaker's direct experience.

However, one problem remains in Discourse Management Theory, in that it cannot predict selection between the *SO*- and *KO*-series in the anaphoric use. The following section will discuss this point.

3.2.3 Issues related to the anaphoric use

3.2.3.1 Selective constraints between the *SO*- and *KO*-series

In the last section, we confirmed that the *A*-series is used not for anaphoric use but for recognitional use, where the choice of the *SO*- or *A*-series in discourse depends on whether or not information is based on direct experience.

Let us now turn to the choice of the *KO*- or *SO*-series in the anaphoric use, where they are interchangeable in general but a native speaker of Japanese can 'feel' a slight difference between them. See the following example taken from Kuno (1973:288):

(8) Boku no tomodachi ni Yamada toyuu hito ga iru nda [K]
I GEN friend among Yamada named person NOM exist it is
ga **kono**/**sono** otoko wa nakanakano rironka de
but KOno SOno man TOP considerable theoretician COP-LINK
'I have a friend by the name of Yamada. This/That man is a theoretician of some caliber, and'

Kuno (1973) comments that in this example the *KO*-series refers to something as if it were visible to both the speaker and the hearer in the immediate discourse situation, whereas the *SO*-series cannot have such a pragmatic effect. This kind of explanation is frequently used in past studies (Sakata 1992, Horiguchi 1992, and Maynard 1998). Maynard (1998:108) proposes the following principle of psychological motivation:

> *KO*-series: items the writer feels close to, feels attached to, particularly when the writer and the partner belong to *uchi* [in-group; J.N.], and the writer wishes to emphasize their common perspective
>
> *SO*-series: items referred to in objective description

I will call this type of explanation about the *KO*-series the ''vividness effect'', where the *KO*-series can express referents with vividness (as if they were visible), compared with neutral descriptions offered by the *SO*-series.

3.2.3.2 Revised ''Vividness effects'' of the *KO*-series

The ''vividness effect'' of the *KO*-series is based on native speakers' communicative intent and its use is hard to predict, since the choice of the *KO*- or *SO*-series appears to be totally dependent on a speaker's state of mind. For this reason, other researchers have searched for predictable factors which describe the difference between the two options.

Shooho (1981) and Yoshimoto (1986) try to capture the difference between the *KO*- and *SO*-series in terms of textual features such as ''saliency'' and ''theme''. Look at the following three uses of demonstratives in the anaphoric taken from Yoshimoto (1986:62).

(9) Yomi kaki zan no gakushuu wa sootaiteki dokuritsusee o [Y]
reading writing arithmetic GEN learning TOP relative independence ACC
motsu bunkazai dearu. Kojin wa hoshiimamani
have cultural heritage COP individual TOP as he likes
kore o kaihensuru koto mo dekinakereba mata
KOre ACC change COMP FOC if cannot also
kore nashide sumasu koto mo dekinai
KOre without manage COM P FOC cannot
Soo suru koto niyotte kare wa tanin to no
SOo do COMP by means of he TOP other people with GEN
komyunikeeshon no shudan o ushinau nodearu
communication GEN means ACC lose it is
'Learning to read, write and do arithmetic is a cultural heritage which is relatively independent. An individual is not free to change it, nor can he dispense with it. If he could, he would lose the means to communicate with others.'

All three demonstratives in (9) can be either the *KO*- and *SO*-series without any problem with acceptability. Yoshimoto (1986:64) interprets the first two uses of the *KO*-series as reflecting the fact that ''Learning to read, write and do arithmetic'' is the main theme of a paragraph, whereas, when using the *SO*-series, writing loses the prominence that the writer intended to convey. The last use of the demonstratives is the *SO*-series, because it refers to non-thematic matter, which can be neglected in a flow of discourse.

Along the lines of the above explanations of the anaphoric use, a series of studies by Iori (1994, 1995a, 1995b, 1996, 2007) is especially significant. Based on the concept of ''cohesion''[11], he finds that Japanese demonstratives in the anaphoric use function as definite articles not syntactically but textually. Iori's contributions to the study of *KOSOA* verify that there are some environments where it is necessary to mark definiteness in Japanese NPs with the *KO*- and *SO*-series in the anaphoric, and this work is the first study to construct a paradigm for the anaphoric use of demonstratives that includes zero marking.

[11] ''Cohesion'' is a concept used in text linguistics. It attempts to have principles apply at the text level, not at a sentential level. Haliday and Hasan (1976:4) write: ''cohesion occurs where the interpretation of some element in the discourse is dependent on that of another. The one presupposes the other, in the sense that it cannot be effectively decoded except by recourse to it. When this happens, a relation of cohesion is set up and the two elements, the presupposing and presupposed, are thereby at least potentially integrated into a text.''

Let us compare English and Japanese definite NPs presented in Iori (2007:40). Underlined NPs are antecedents and Japanese sentences are equivalent to English (Ø stands for zero marking).

(10) Kinjo ni <u>otoko</u> ga hitoride sundeiru. {**Kono/Sono/Ø}** otoko [I]
neighbour LOC man NOM alone living KOno SOno Ø man
wa daigakusee da
TOP university student COP
'There is <u>a man</u> living by himself in my neighbourhood. **The/That/*Ø** man is a university student.'

(11) Kinjo ni <u>otoko</u> ga hitoride sundeiru. [I]
neighbour LOC man NOM alone living
{**Kono otoko wa / Sono otoko wa / *Ø**} omoshiroi yatsu da.
KOno man TOP SOno man TOP Ø interesting guy COP
'There is <u>a man</u> living by himself in my neighbourhood. **This man/ That man/*Ø** is an interesting guy.'

(10) and (11) show that, in some situations, Japanese allows zero expressions of demonstratives [Ø NP] for a repeatedly-mentioned definite NP as seen in (10) and even the subject itself can be dropped in (11), while English does not allow the same behaviour, e.g. requiring an article or demonstrative in examples (10) and (11).

However, zero marking in Japanese is not always acceptable to refer to referents mentioned a second time. Iori proposes some conditions for the obligatory use of demonstrative determiners in definite NPs in Japanese. Firstly, look at the *KO*-series taken from Iori's examples (1994:49):

(12) Kinoo hisashiburini "Bottchan" o yonda. [I]
yesterday after a long time Bottchan ACC read
Kono hon wa itsu yonde mo omoshiroi.
KOno book TOP whenever read-LINK FOC interesting
'Yesterday, I read "Bottchan" after a long time. This book is always interesting whenever I read it.'

The noun phrase *kono hon* 'this book' in (12) refers back to the referent *Bottchan* and the book title *Bottchan* is rephrased by a general term *hon* 'book'. When a NP that refers to a named item is rephrased by a NP that denotes a category, it is obligatorily marked by *kono*. In this case, the *SO*-series and zero marking are not acceptable. Next, observe the *SO*-series.

(13) Yamada kun wa oyogi ga tokui de kokutai
Yamada Mr TOP swimming NOM good at COP-LINK the National Athletic Games
ni mo deta koto ga aru ndesu.
LOC FOC participated COMP NOM exist it is
Sono Yamada kun ga oboreshinu nante shinjiraremasen [I]
SOno Yamada Mr. NOM drown thing like cannot believe
'Mr. Yamada is good at swimming and even participated the National Athletic Meet. I cannot believe that he drowned.'

In (13), the first sentence is related to the second sentence disjunctively, since the first sentence 'Mr.Yamada is good at swimming and participated even in the National Athletic Games' would rarely evoke the content of the second sentence 'he drowned'. Iori argues that, when proper nouns are repeatedly used and express the disjunctive contents in texts, *sono* is appropriate and *kono* and zero NP lose cohesion.[12]

Compared with the vividness effect of the *KO*-series in the anaphoric use, which is supposed to be related with the exophoric use because of the perception of discourse participants, Iori (2007:58) proposes that textual based constraints in the anaphoric use are not directly relevant to the exophoric use.

3.2.4 Summary

In the exophoric use, the analyses of *KOSOA* focus on whether the system of *KOSOA* is person-oriented or distance-oriented. In the recognitional use, pragmatic conditions for using the *A*-series relate to whether a speaker experiences referents directly or not, one condition of which is founded on shared knowledge of the interlocutors. In the anaphoric use, in addition to psychological factors such as the vividness effect of the *KO*-series, it has been stated that

[12] In (13), if a speaker assumes that a hearer has shared knowledge about Yamada, the *A*-series are also available. However, *ano* also loses cohesion because shared knowledge is not text-internal information.

several textual constraints require the obligatory use of the *KO*- or *SO*-series for the sake of cohesion.

The correlation between *KOSOA* and the *–ko* suffix is an important topic and I now turn to the literature on the *–ko* suffix. I will reconsider the above issues of *KOSOA* in detail in Chapter 6.

3.3 Previous studies of the *–ko* suffix in Japanese demonstratives

In 3.2, I presented how the studies of *KOSOA* have been conducted in terms of semantic values and pragmatic uses. Researchers have not yet paid much attention to the semantic properties of the qualitative suffixes of Japanese demonstratives, where the *–ko* suffix is normally considered to simply encode [place] as part of a paradigm that includes the *–re* suffix for [thing], the *–itsu* suffix for [person] and the *–tchi* suffix for [direction].

In this section, I will consider some indispensable works on the *–ko* suffix as well as pointing to some of their problems. The following review is divided into three sub-sections: (i) dictionary definitions of the *–ko* suffix, (ii) the *–ko* suffix in the exophoric use and (iii) the *–ko* suffix in the anaphoric use.[13] I will refer to three important studies: Morita (1989),[14] Takahashi and Suzuki (1989)[15] and Takeda (1994).

3.3.1 The *–ko* suffix in dictionaries

Dictionaries often list in random order the meanings and uses of the *–ko* suffix, so that there is much confusion in terms of semantic classification.[16]

First of all, I will present how the *–ko* suffix is treated in dictionaries. For example, look at the first definition of *koko, soko,* and *asoko* in *Koojien*, a highly respected Japanese-Japanese dictionary:

[13] There are no studies of the recognitional use and the discourse deictic use in terms of the *–ko* suffix of spatial demonstratives.
[14] The first publication was Morita (1980).
[15] The original version was apparently written in 1977.
[16] Concerning problems of definitions in dictionaries, see, for example, 'circularity', where a statement describing a word contains another word that must be checked in a different entry (Wierzbicka 1987, Lyons 1995 and Taylor 2003).

Koko is a place which a speaker can point out by saying *kore*.
Soko is a place which a speaker can point out by saying *sore*.
Asoko is a place far away from the speaker and the hearer.

A problem with such definitions of *koko* and *soko* is that we need to know what *kore* and *sore* mean in order to understand the terms *koko* and *soko*. In other words, *koko* and *soko* are defined indirectly by means of *kore* and *sore*.

So, let us briefly look at the dictionary definitions of *kore* and *sore*.

Kore refers to things that are spatially, temporally and psychologically close to the speaker
Sore refers to things that are spatially, temporally and psychologically close to the hearer

The definitions of *kore* and *sore* are composed of two features: [things] and [proximity of interlocutors]. Summarizing the two definitions of *koko* and *kore*, the meaning of the *–ko* suffix can be assumed to be simply [place].

Next, look at the spatial meanings of *koko* listed in *Koojien*:

(I) the place where the speaker is, or around the speaker
(II) the place that the speaker mentioned before
(III) the person who is the speaker himself (in Classical Japanese)
(IV) the person who is near the speaker (in Classical Japanese)
(V) this world
(VI) this country

The above listed meanings are not for the *–ko* suffix iteself but for *koko* as a spatial demonstrative. Therefore, these classifications show awkward descriptions in terms of the semantic values of the *–ko* suffix.

Firstly, the difference between the categories (I) and (II) is distinguished according to pragmatic uses, namely the exophoric use for (I) and the anaphoric use for (II), and not the meanings of the *–ko* suffix. Secondly, the difference between the categories (III) and (IV) is not based on meanings of the *–ko* suffix but the meanings of the *KO*-series for (III) and the *SO*-series for (IV). Furthermore, the classical meanings that are no longer used in modern

Japanese are listed in (III) and (IV) along with their contemporary meanings. Thirdly, the categories (V) and (VI) are established in terms of contextually interpreted meanings, and not for their semantic properties.

Next, let us observe how Morita (1989) treats the *–ko* suffix in *Kiso Nihongo Jiten* (Basic Japanese Dictionary), a well-respected dictionary used especially for teaching Japanese. He describes the meanings of the *–ko* suffix in terms of four categories as follows:

(i) refers to geographical places
(ii) refers to parts and points of things
(iii) refers to time (only with the KO-series)
(iv) is used in discourse

Here again, the semantic properties of the *–ko* suffix are presented together with its pragmatic uses, as was seen in *Koojien*. For example, the classifications (i), (ii) and (iii) are based on semantic values, whereas (iv) relies on the pragmatic use of demonstratives such as the anaphoric use and the discourse deictic use. That is, (iv) is essentially a matter of the deictic part, *KOSOA*, and not the semantics of the *–ko* suffix.

Secondly, compare the following two examples, taken from Morita. They distinguish reference to a geographic location from any other location in general.

(14) (the speaker is pointing to a map.)
Koko ga daigaku de... [M]
KOko NOM university COP-LINK
'Here is the university, and…'

(15) (Looking at a hearer's paper)
Koko no joshi no tsukaikata ga yokunai kara naoshimashoo.
KOko GEN particle GEN how to use NOM not good because let's correct
'Let's correct the use of this particle here, because it is not good.' [M]

The examples above are categorised in two different ways. The first one is classified under (i) as referring to geographic places and the second one under (ii) as referring to parts and points of things. However, we can ask why they cannot be treated in the same way, because *koko* in both examples points to a part of a map or a text in the exophoric use. Therefore, it seems

unnecessary to distinguish part-whole relations related to geographic names from all other part-whole relationships. I will analyse this type of polysemous aspect of the *–ko* suffix in 5.3.8.

The last problem in Morita concerns his classification (iii), which refers to time. Let us look at his examples of temporal expressions.

(16) Ima **koko** de kokoro o irekaete doryokusureba [M]
now KOko LOC mind ACC change-LINK if make an effort
'If you change your attitude and make an effort right here right now,'

(17) Ame wa **koko** toobun wa furanai deshoo. [M]
rain TOP KOko while TOP will not rain COP-probable
'It probably won't rain for a while'

(18) **Koko** shibaraku wa nihon o hanarenai yotee desu. [M]
KOko a while TOP Japan ACC will not leave plan COP
'I'm planning not to leave Japan for a while.'

Koko in the three examples is regarded as referring to time, but, even if *koko* is omitted, we can interpret them as equivalent expressions without any change in the temporal meanings. Let us bracket *koko* in all of these examples.

(16)' Ima (koko de) kokoro o irekaete doryokusureba [M]
'If you change your attitude and make an effort right here right now,'

(17)' Ame wa (koko) toobun wa furanai deshoo [M]
'It probably won't rain for a while.'

(18)' (Koko) shibaraku wa nihon o hanarenai yotee desu. [M]
'I'm planning not to leave Japan for a while.'

This may indicate that the *–ko* suffix does not inherently hold temporal meanings. Almost all previous analyses of the *–ko* suffix remark upon the temporal meanings of *koko*. However,

the issue is more complex. I will examine temporal expressions with the *–ko* suffix in detail in 7.3. This thesis will resolve the lack of clarity seen above.

3.3.2 The *–ko* suffix in the exophoric use

Arbitrarily listed meanings of the *–ko* suffix in dictionaries are problematic, because they confuse (i) the semantics of the *–ko* suffix with the deictic features of *KOSOA,* (ii) the meanings of the *–ko* suffix with its pragmatic uses and (iii) meanings in Modern Japanese with ones in Classical Japanese.

The research conducted by Takahashi and Suzuki (1989) appears to be the first to focus specifically on the qualitative parts of Japanese demonstratives, which have been neglected for a long time. They analyze all qualitative suffixes in pronouns, including *–re* [thing], *–ko* [place], *–itsu* [person], and *–chira* [direction], and restrict their research to the exophoric use. However, their analyses of the *–ko* suffix also display the same problems as those seen in the dictionaries.

Let us briefly observe the classifications of the *–ko* suffix in Takahashi and Suzuki (1989). They classify its meanings into six categories with the main category [place] in situations further subcategorized into four meanings.

(I) [place] in situations
  (i) the place proximal to the speaker, medial to the speaker, and distal from interlocutors
  (ii) the territory near the speaker, or near the hearer or far way from interlocutors
  (iii) [area]
  (iv) [container]
(II) [parts of whole]
(III) [place] in maps, addresses or written texts
(IV) [group]
(V) [scene]
(VI) [time]

Firstly, I will point out a common mistake seen in almost all the previous studies, which confuses the semantics of the qualitative suffix with the deictic meanings of *KOSOA*. For

example, the subtypes of [place] given above (i) and (ii) are not meanings of the *–ko* suffix itself, but are related to *KOSOA*, since they are based on ‘‘distance’’ and ‘‘interlocutors’ territory’’, in contrast with (iii) [area] and (iv) [container].

When considering how [place] is part of the meaning of the *–ko* suffix, the most important thing is to exclude the semantic features of *KOSOA* from those of the *–ko* suffix, because, when [place] of the *–ko* suffix is defined using features of distance, [place] becomes a relative concept such as [near/far] between discourse participants and referents, which can be shown to really be a feature of *KOSOA*.

Furthermore, concerning the subcategories [area] in (iii) and [container] in (iv), it is more appropriate to consider them as types of referents rather than subtypes of the semantics of [place].[17] Confusing the characteristics of the *–ko* suffix with the deictic meanings of *KOSOA* and classifying types of referents as spatial meanings such as [area] and [container] can be seen as common problems in many previous studies.

Secondly, the same question arises as was seen in Morita, about the categories (II) and (III). Takahashi and Suzuki distinguish the two categories (II) parts of a whole and (III) place names on a map or in written texts. However, a more economical way of categorization would be that category (II) can incorporate (III), such that a speaker points out a part of the whole, regardless of whether it is the place names on a map or something in a written text.

Thirdly, let us consider category (IV) referring to [group] and category (V) referring to [scene]:

(19) (Inside a motor company)

X: Watashi wa **koko** no sekininsha da. [T and S]

I TOP KOko GEN manager COP

‘I am the manager here.’

(20) (Watching a screen with a stop watch)

X: Sutoppu. **Koko** kara da. Jikan wa? [T and S]

stop KOko from COP time TOP

‘Stop. From now on. What time is it?’

[17] As seen in the previous section, the *Koojien* dictionary defines ‘‘this world’’ and ‘‘this country’’ as meanings of the *–ko* suffix, but they are also types of referents.

Takahashi and Suzuki interpret that *koko* in the first example refers to the company, which exists in a place where the speaker stands in the current speech situation. In the second example, the speaker uses *koko* to refer to a particular scene being watched on a screen.

Here, we can ask whether it is necessary to establish these categories (IV) and (V) as individual characteristics of the *–ko* suffix, independent from the feature [place]. I will explain that they are extended meanings of central properties of the *–ko* suffix in 7.2.5.2 and 7.3.

Fourthly, considering the sixth category [time], Takahashi and Suzuki classify two types of temporal expression of the *–ko* suffix: time from the present to the future and time from the present to the past. Look at the following examples from Takahashi and Suzuki (1989).

(21) …**koko** ichinen inai no aidani okori… [T and S]
KOko one year within GEN during occur-LINK
'It will occur within this year'

(22) …**koko** san nen bakari wa Kuni-ichi san ni attenai noyo. [T and S]
KOko three year about TOP Kuni-ichi Mr/Ms DAT did not meet SF
'I have not seen Mr/Ms Kuni-ichi for three years.'

Takahashi and Suzuki state that *koko* in (21) is used for temporal expressions from the present to the future, while *koko* in (22) denotes from the present to the past.[18] However, this interpretation is unsustainable, because the meanings from the present to the future or from the present to the past are encoded by the tense marking of the clauses. For example, by changing the tense of the clauses in the above examples,

(23) …**koko** ichinen inai no aidani **okotta**…
KOko one year within GEN during occurred
'It occurred within this year'

[18] *Koojien* employs the same type of definitions about temporal meanings of *koko* as Morita (1989).

(24) …**koko** san nen bakari wa Kuni-ichi san ni **awanai** noyo.
KOko three year about TOP Kuni-ichi Mr/Ms DAT not meet SF
'I will not see Mr/Ms Kuni-ichi for three years.'

the temporal meanings shift from the present to the past in (23) and from the present to the future in (24). This indicates that the *–ko* suffix is not in itself related to the meanings of [future] and [past].

Also, as indicated by Morita's examples in the previous section, it is questionable whether the *–ko* suffix directly holds the temporal meanings or not, because even omitting *koko* in (16)', (17)' and (18)' does not change the temporal meanings expressed by the clauses.[19]

Finally, I will point out that Takahashi and Suzuki (1989) do not attempt to conduct any comparison between overlapping meanings among various suffixes: for example, [place] and [time] meanings of the *–re* suffix. Look at the following examples from Takahashi and Suzuki (1989).

(25) …**kore** yori kita ni mukatte… [T and S]
KOre from north LOC go-LINK
'…going to the north from this place'

(26) …**kore** made watashitachi ga tamochi tsuzuketa mono ga… [T and S]
KOre until we NOM keep-LINK continued thing NOM
'What we were keeping until now is …'

Kore in both these examples is interchangeable with *koko*. If the *–re* and *–ko* suffixes can refer to the same referents, the question arises as to what the difference is between the two forms, the *–ko* suffix and *–re* suffix. I will attempt to explain this from the perspective of the conceptual differences in a speaker's construal in 5.2.5 and Chapter 7.

[19] The difference between temporal expressions with and without *koko* can be described on a conceptual level, which I will detail in 7.3.6.1.

3.3.3 The *–ko* suffix in the anaphoric

Following Takahashi and Suzuki's works, which focused on analyzing the meanings of the *–ko* suffix used in the exophoric use, Takeda (1994) has also argued for the necessity of analyzing the qualitative parts of Japanese demonstratives in the anaphoric use, concentrating on *soko*.

In the anaphoric use, the *–ko* suffix can refer back to diverse types of antecedents, the nouns of which are not considered to have the meanings of [place]. Let us take a variety of examples from Takeda (1994), which I have shortened for the ease of discussion.

(27) Sumoo o yoku terebi de miru. Shikashi **soko** ni mo... [T]
Sumoo ACC often TV on watch but SOko LOC also
'I often watch Sumoo wrestling on television. But there is also…'

(28) Jinsee wa saigo made gyanburu nanoda. Geemu kara orite shimaeba [T]
life TOP end until gamble it is game from leave-LINK if do so
moo **soko** ni hikari ga ataru koto wa nai.
again SOko LOC light NOM shine COMP TOP not
'Life is a gamble until the end. If we give up, we cannot shine the light on there again.'

(29) 'Fushigi no kuni no arisu' o yomi ijoonahodo koofunsuru. [T]
'Alice in Wonderland' ACC read-LINK to the extent excite
Soko ni wa kyookuntekina hanashi to wa betsuno sekai ga ari,…
SOko LOC TOP didactic story with TOP other world NOM exist-LINK
'I am extraordinaryly excited when I read *Alice in Wonderland.* In it, there is a world apart from didactic lessons, and…'

(30) Fuan da kara samishii kara to itte **soko** kara nigeruna. [T]
anxiety COP because lonely because QUO say-LINK SOko from not escape
'Don't escape from there because you feel insecure or lonely.'

The *–ko* suffixes in examples (27) to (30) refer to the following respectively: the world of *Sumoo* 'Sumoo wrestling' in (27), *Jinsee* 'human life' in (28), the book 'Alice in Wonderland' in (29) and the state of mind of insecurity and loneliness in (30). Takeda explains that they do not originate from meanings of [place] directly; rather they are metaphorically extended.

Takeda presents three abstractions of referents for the *–ko* suffix into the following three categories:

(i) a border line or a thing on which we suppose a border line is drawn
(ii) a line-shaped thing
(iii) an interior part of a thing

For example, he compares 'human life' to **a line-shaped thing** and 'contents of a book' and 'the state of mind' to **the interior part of a thing**. He does not mention explicitly whether he takes a cognitive approach or not but his abstract classifications of referents seem to exploit cognitive interpretations such as ''conceptual metaphors'' (Lakoff and Johnson 2003), where 'life' can be understood as an analogy of a time line and 'book' can be regarded as a kind of 'container'. I will introduce several important notions of the cognitive approach in Chapter 4.

Unlike many of the works before Takeda, which have simply ended with classifications of the *–ko* suffix such as [place], [part] and [time], he defined meanings of the *–ko* suffix in a conceptual way without even utilizing the feature [place]. I will expand his analytic approach to the exophoric use, which can be considered to represent more basic semantic values than the anaphoric use, since the anaphoric use is hypothesised to be an extension of the exophoric use.[20]

3.3.4 Summary

This section has presented an overview of previous studies concerning the *–ko* suffix and pointed out several problems which will be resolved in this thesis. The most crucial problem is to determine characteristics of the *–ko* suffix by comprehending the deictic features of *KOSOA* such as [near/far] or person's territory; the main meanings of the *–ko* suffix have

[20] See Himmelman (1996), Lyons (1999), Croft (2002) and Diessel (1999, 2006).

been defined as ‘‘place near to a speaker’’ for *koko*, ‘‘place middle distant from a speaker’’ for *soko*, ‘‘place far from a speaker’’ for *asoko* in many previous studies. However, these types of analyses of the *–ko* suffix just state that the meaning of the *–ko* suffix is [place] and the sub-categorizations of [place] of the *–ko* suffix are based on meanings of *KOSOA*.

Furthermore, some research has confused the analysis of the meanings of the *–ko* suffix with classification of types of referents. For example, [country] and [world] in the *Koojien* dictionary and [container] and [area] in Takahashi and Suzuki (1989) are better considered as types of referents, and not as semantic characteristics of the *–ko* suffix.

One of the reasons why such problems occur in these past studies is because researchers have not defined what [place] is in the first place or what the *–ko* suffix can represent in a rigorous way. Therefore, the original contribution of this thesis is to clarify the ‘pure’ semantic properties of the *–ko* suffix.

This thesis will pursue the direction of Takeda (1994), who defined the meanings of the *–ko* suffix in a conceptual way without using the semantic property [place] and the notion of distance of *KOSOA* in the anaphoric use. I will apply this to the semantic analysis of the *–ko* suffix in the exophoric use and employ a cognitive approach.

Chapter 4 Cognitive approach

4.1 Introduction

In the previous chapters, we have reviewed the characteristics of the Japanese demonstratives from such aspects as linguistic typology, syntax, pragmatic uses and historical developments, and examined the semantics of *KOSOA* and the *–ko* suffix. As a preparative phase for the main analyses, this chapter will clarify the objectives of the study and introduce key concepts from cognitive approaches.

4.2 Objectives

Previous research into Japanese demonstratives has concentrated on studying the deictic part *KOSOA* with respect to semantics and pragmatics in diverse ways. On the other hand, little attention has been paid to the qualitative facets of demonstratives. However, without an exhaustive study of the qualitative suffixes, comprehensive understanding of Japanese demonstratives cannot be achieved. The study of qualitative features can shed light on Japanese demonstratives in different directions from previous studies and contribute to discovering new facets of their properties.

Several questions arise from the literature review of the *–ko* suffix in the last chapter. Firstly, although previous research considers the *–ko* suffix to have various meanings, for example [country] and [world] in the *Koojien* dictionary and [container] and [area] in Takahashi and Suzuki (1989), I will attempt to make clear distinctions between defining the conceptual properties of the *–ko* suffix and classifying types of referents expressed by *koko*, *soko*, and *asoko*.

Concerning the fact that a linguistic expression has multiple meanings, Senft (1997:10) suggests that there are three possible assumptions: (i) there is unlimited polysemy (listing various usages of expressions), (ii) there is complete contextualization (assigning meanings to particular contexts only), and (iii) there is something like a ‘basic meaning’ that can be modified by various semantic or cognitive operations in a conceptual structure.

By adapting the last-mentioned assumption of Senft, I will attempt to establish the essential meanings of the *–ko* suffix, focusing on what kind of properties the *–ko* suffix can represent conceptually.

Secondly, the main problem in past studies such as seen in Morita (1989) and Takahashi and Suzuki (1989) is that the semantics of the *–ko* suffix are mostly confused with that of the deictic part *KOSOA*. If meanings of *KOSOA* are used for defining the *–ko* suffix, pure concepts that the *–ko* suffix represents cannot be extracted. Therefore, I attempt to abstract the semantic structure of the *–ko* suffix without the notion of [distance] and propose alternative understandings of the *–ko* suffix, rather than simply defining it as the general meaning [place].

After defining the *–ko* suffix, I will categorize schematic patterns for reference of the *–ko* suffix in the exophoric use. The result will extend to cognitive and pragmatic meanings in order to answer the following questions: (i) what kind of correlations exist among meanings of the *–ko* suffix such as [place], [part] and [time], (ii) how are the conceptual meanings of the *–ko* suffix interpreted in the context of ‘‘distance’’ and ‘‘person’’, when combined with *KOSOA*, (iii) how can the difference in the use of the *–ko* suffix and the *–re* suffix be discerned when they can be used interchangeably in some contexts, and (iv) how is the spatial meaning of the *–ko* suffix extended to refer to notions that contain a temporal dimension?

This study follows on from Takeda (1994) and takes the cognitive approach as a central tool for analysis. This approach is summarized in the following section.

4.3 Methodology

In previous studies, the cognitive approach has been used to explain the meanings of demonstratives. For example, Takeda (1994) has introduced metaphorical and metonymical abstractions for describing a superordinate category (parts or things which have a borderline, line-shaped things and interiors of things) for classifying referents in the anaphoric use and Kinsui and Takubo (1990, 1997) have built a discourse management theory based on the theory of Mental Spaces (Fauconnier 1985).[1] This thesis will pursue this direction in the study of spatial demonstratives. In addition, I will remark upon generalizations and

[1] I will present a case study of the theory of Mental Spaces in 4.5.

explanations found in linguistic typology when it is necessary in order to incorporate perspectives from cross-linguistic comparisons.

4.3.1 Cognitive approach

First of all, let us look at the essence of the cognitive approach. According to Croft and Cruse (2004:1), there are three major hypotheses guiding cognitive linguistic approaches to language:

(I) Language is not an autonomous cognitive faculty
(II) Grammar is conceptualization
(III) Knowledge of language emerges from language use.

These hypotheses lead to further corollaries: (i) that linguistic knowledge is basically conceptual structure, (ii) that a major aspect of human cognitive ability is the conceptualization of the experience to be communicated, and (iii) that categories and structures in semantics, syntax, morphology, and phonology are built up from our cognition of specific utterances on specific occasions of use (Croft and Cruse 2004:1-4).

Considering meanings and conceptualization, Lichtenberk (1991:477) remarks:

> Humans do not have direct, unmediated access to reality. Reality exists independently of us, but our perception of it is active, not passive. To a large degree, our perception of the world is determined by structures that originate with us; the concepts we form have to do with the world as perceived by us. The meanings of linguistic elements, then, are not mere reflections of the properties of phenomena, and in that sense they are subjective.

Using the cognitive approach indicates a commitment to the above hypotheses in certain respects. Among them, one of the essential points of the cognitive approach is that using language means conceptualizing the world through cognitive abilities such as perception and imagery. Therefore, language users as speakers or writers can be regarded as conceptualizers of the world.

4.3.2 Four basic theoretical constructs for the cognitive approach

Clausner and Croft (1999:1-3) suggest that there are several basic theoretical constructs, in particular ‘‘concepts’’, ‘‘domains’’, ‘‘construal’’, and ‘‘category structure’’, which are essential for all cognitive linguistic theories.[2]

Concept	is a mental unit.
Domain	is the background knowledge for representing concepts.
Construal	is the process by which a person’s experience in the world is conceived in a variety of ways.
Category	is structured internally by prototype-extension relations among its members and externally (at least) by taxonomic relations between categories.

Let us briefly summarize these four important terms in the cognitive approach. As seen in the preceding section, the cognitive approach considers the meanings of linguistic expressions as ‘‘concepts’’, which need to presuppose background knowledge structures called ‘‘domains’’. In contrast to definitions of meanings in dictionaries, concepts can be comprehended based on domains[3] (including encyclopedic knowledge). Furthermore, a ‘‘category structure’’ can classify meanings of expression according to gradations from central meanings (prototypical meanings) to peripheral meanings.[4]

In order to capture meanings of languages, ‘‘construals’’ are required, and this is related to how conceptualizers experience the world and how they can express language by interpreting experiences. That is, different construals give different meanings for a single phenomenon.[5] For instance, truth conditional semantics presupposes that ‘‘Hanako hit Taro’’ and ‘‘Taro was hit by Hanako’’ share the same logical meaning in terms of the content of the proposition, while cognitive semantics considers the two sentences to have different

[2] Regarding fundamental ideas of cognitive linguistics, see Langacker (1987, 1991), Lakoff (1987), Taylor (2004) and Croft and Cruse (2004). In Japanese, see Yamanashi (1995), Kawakami (ed) (1996), Oohori (2002), Matsumoto (ed) (2003), and Fukada and Nakamoto (2008).

[3] I will use ‘‘domain’’ as a cover term for other similar notions such as ‘‘Script’’ (Schank and Abelson 1977), ‘‘Frame’’ (Fillmore 1982a) and ‘‘Idealized cognitive models’’ (Lakoff 1987).

[4] In classical views of ‘‘categories’’, members of a category are considered to be uniform and a sharp demarcation among categories can be drawn. On the other hand, prototype categories accept that category membership can be a matter of degree and differences among categories are considered to be fuzzy (Rosch 1978, Fillmore 1982a, Lakoff 1987 and Taylor 2003). Fuzziness of categories will be discussed in 5.2.6.

[5] In other words, it is not that linguistic phenomena have determinable meanings but that construing linguistic phenomena creates flexible meanings.

meanings, because they represent different construals: an event construed from the points of view of two different people.[6]

Therefore, introducing concepts based on domains and category structures in the semantic analysis of natural languages makes it possible to capture meanings of linguistic expressions in much more diverse and complex ways than traditional treatments of semantics which do not use cognitive notions.

4.3.3 The relationship between domains and concepts: ‘‘base’’ and ‘‘profile’’

Throughout the previous sections, we have outlined the essentials of the cognitive approach. In this section, I will introduce cognitive concepts such as ‘‘base’’ and ‘‘profile’’, in addition to the relationship between a domain and a concept. In the simplest way, the ‘‘profile’’ is a part of a concept and has salience against the remaining aspects of a concept called the ‘‘base’’, where a profiled concept can function as foregrounding against a base as background.

Let us look at one of the representative examples: the concept TRIANGLE and the domain SPACE.[7] According to Langacker (1987:147, 486), domains can be divided into two types, which are basic or non-basic. ‘‘Basic domains’’ are primitive and rooted in directly embodied human experience, e.g. TIME, SPACE, TEMPERATURE, and COLOR. All other abstract domains are called ‘‘Non-basic domains’. Let us represent the domain SPACE as follows:

Figure (4.1): The domain SPACE

[6] In early generative grammar, these two sentences were treated as having the same meaning in a deep structure but different meanings in surface structure. From a discourse-functional approach, Kuno and Kaburagi (1977) and Kuno (1978) propose ‘‘empathy’’ for interpreting point of views in linguistic phenomena, and this influenced cognitive linguistics (Croft and Cruse 2004). Shibatani (1985) interprets the difference of perspective taken by a speaker, such as between active voice and passive voice, as a phenomenon of ‘‘agent de-focusing’’.

[7] So far, I have signified cognitive and pragmatic meanings with capital letters, but after introducing distinctions of cognitive meanings such as concepts and domains, I will use large capitals for ‘general concepts of domains’ and small capitals for ‘individual concepts in domains’.

In fact, this kind of representation of domains never exists, because a domain must include at least one concept and it is impossible for the domain itself to stand independently. Now, let us illustrate the concept TRIANGLE against the domain SPACE.

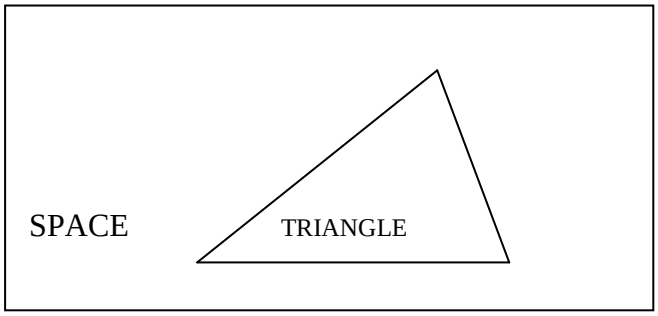


Figure (4.2): The domain SPACE and the concept TRIANGLE

This figure symbolizes a minimum relation between a concept and a domain, where the concept TRIANGLE cannot be comprehended without the domain SPACE. Furthermore, we can introduce another concept: OBLIQUE SIDE. Look at the next figure.

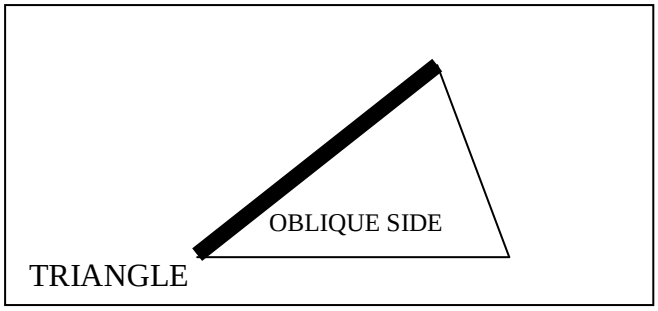


Figure (4.3): The domain TRIANGLE and the concept OBLIQUE SIDE

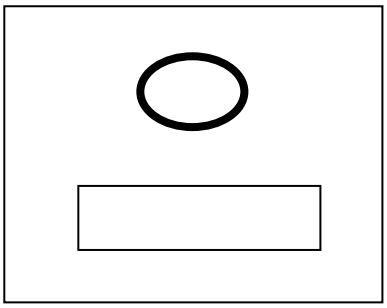
To understand the concept OBLIQUE SIDE, it requires a background understanding of the domain TRIANGLE. In Langacker (1987), this sort of relationship between OBLIQUE SIDE and TRIANGLE is described as one of a notion ‘‘profile’’ against a ‘‘base’’, where the concept OBLIQUE SIDE is profiled against the base TRIANGLE. The terms ‘‘profile’’ and

‘‘base’’ are fundamental notions for cognitive linguistics, with which we can enhance the salience of phenomena to human beings’ attention.[8]

The concept OBLIQUE SIDE can be comprehended in terms of the domain TRIANGLE; however at the same time, the domain TRIANGLE can be the concept TRIANGLE against the domain SPACE. That is, a switching of the relationship between a concept and a domain for a particular expression depends on construals and what a speaker wants to profile in the present phenomena (Croft and Cruse 2004:24).[9]

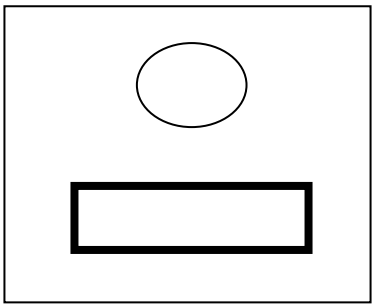
4.3.4 The relationship among concepts: ‘‘landmark’’ and ‘‘trajector’’

Next, let us look at a case when there is more than one profiled concept in a domain. Langacker (1987:219, 2008:73) explains the two sentences *The lamp is above the table* and *The table is below the lamp* by virtue of the following figures (modified in a simple way, where the Circle stands for LAMP and the four-sided figure stands for TABLE. Highlighted lines indicate prominence):



[ABOVE]

The lamp is above the table.



[BELOW]

The table is below the lamp.

Figure (4.4): The difference between ‘‘landmark’’ and ‘‘trajector’’

[8] In Croft and Cruse (2004:46), there is a table of the relationship between linguistic construal operations and general cognitive processes, which I will use in the conclusion. Instead of ‘‘profile’’ and ‘‘base’’, ‘‘figure’’ and ‘‘ground’’ are terms used in psychology, and these are also introduced by Talmy (1978) into linguistics. I will use ‘‘profile’’ and ‘‘base’’ when it is necessary to emphasize the salience of phenomena.

[9] It is not necessary to match up one concept with one corresponding domain. Cases that need the combination of multiple domains simultaneously presupposed by a single concept are called ‘‘domain matrix’’ (Langacker 1987 and Croft and Cruse 2004).

When two concepts exist in a domain, one concept holds more prominence than another. In the first figure, the *table* profiles a thing [table], *above the table* profiles a spatial relationship and *the lamp above the table* profiles *the lamp*. In this construal, *lamp* functions as the ‘‘trajector’’ and holds more prominence, while *table* as the ‘‘landmark’’. In the second figure, the ‘‘landmark’’/‘‘trajector’’ alignment and prominence is reversed.

Although both sets of ‘‘base’’ and ‘‘profile’’, and ‘‘landmark’’ and ‘‘trajector’’, are key notions for the cognitive approach, this study will mainly focus on which facet of a referent is profiled in a speaker’s construal when there are alternate expressions for a particular situation.

4.3.5 Image schema

Finally, I will introduce related significant characteristics of basic domains, one of which is called ‘‘image schema’’ (Johnson 1987, Lakoff 1987, Clausner and Croft 1999, and Croft and Cruse 2004). Image schemas are schematic patterns recurring in basic domains and regarded as subtypes of basic domains. The most important feature of basic domains is to ‘‘be footed in fundamental human bodily experiences’’ (Clausner and Croft 1999:6). In other words, an image schema is also a construal of experiences, especially based on bodily experiences. Clausner and Croft (1999:15) list several image schemas with relation to the basic domains of SPACE, SCALE, CONTAINER, FORCE, UNITY/MULTIPLICITY, IDENTITY and EXISTENCE.

The most relevant image schema for this thesis is the CENTRE-PERIPHERY image schema, which Johnson (1987:124) illustrates as follows:[10]

[10] It is not necessary to have individual visualizations of image schemas. However, I will accept Johnson’s suggestion (1987:23), ‘‘I will employ drawings of this sort as aids in the description of particular image schemata. Such diagrams are particularly helpful in identifying the key structural features of the schemata and in illustrating their internal relationships.’’

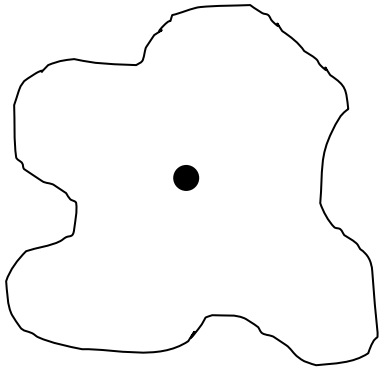


Figure (4.5): Image schema of CENTRE-PERIPHERY

According to Johnson (1987:124), ‘‘the centre-point with black dots represents my perceptual and experiential centre which defines my experiential space and fades off into my horizon (wavy line).’’ When we set this image schema into the domain SPACE, Johnson’s abstraction is modified as in the following picture.

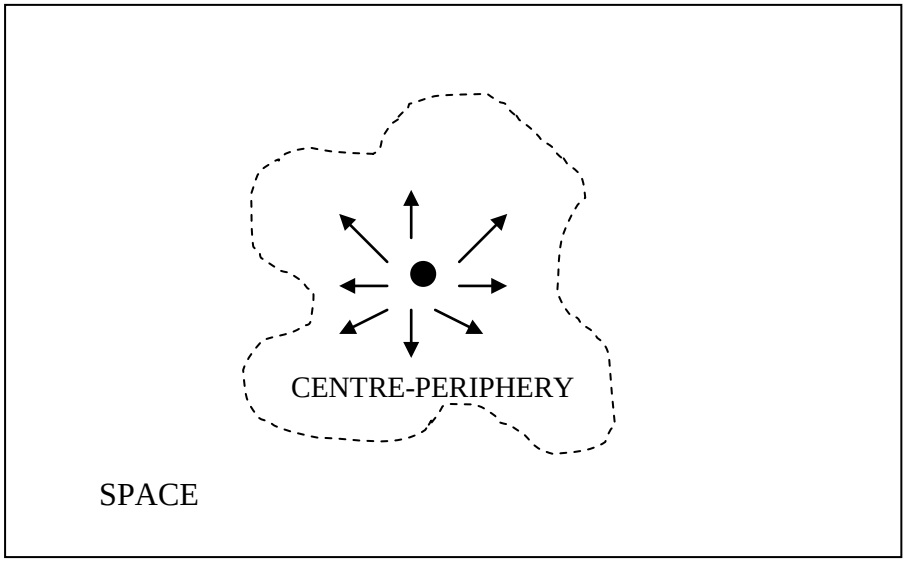


Figure (4.6): CENTRE-PERIPHERY schema in the domain SPACE

Figure (4.6) represents the CENTRE-PERIPHERY schema in the SPACE domain, which is a conceptual pattern found in SPACE, and SPACE tends to be construed from a certain centre point to a radiated periphery. I will draw the wavy line using a broken line, which symbolizes that the periphery need not be bounded or closed (I will detail ‘‘boundedness’’ in 5.2.4).

Concerning why the schematic pattern CENTRE-PERIPHERY recurrently occurs in the conceptual domain SPACE, Johnson (1987:124) provides the following explanation:

> The fact of our physical embodiment gives a very definite character to our perceptual experience. Our world radiates out from our bodies as perceptual centres, from which we see, hear, touch, taste, and smell our world. Our perceptual space defines a domain of macroscopic objects that reside at varying distances from us. From our central vantage point we can focus our attention on one object or perceptual field after another as we scan our world.

The most important point is that our bodies are perceptual centres in our world. This way of viewing spatial conception is generally called ‘‘egocentric’’ (Piaget and Inhelder 1956 and Lyons 1977) and the body as a central point is called the ‘‘deictic centre’’ (Bühler 1934 and Levinson 1983). I will explore the ‘‘deictic centre’’ in 5.3.2.

Let us observe another type of image schema and spatial conception, where LEFT-RIGHT schema in SPACE is illustrated as follows:

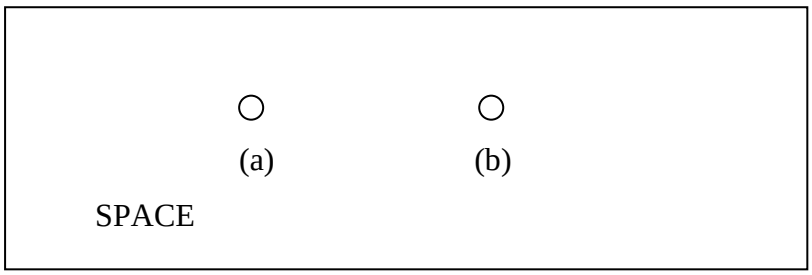


Figure (4.7): LEFT-RIGHT in the domain SPACE

When we come across two entities (in the above figure, circles (a) and (b) in SPACE), we automatically assign either one to the left or to the right, according to LEFT-RIGHT schematization in human perception. However, we cannot determine which is LEFT or RIGHT, because it depends on where the viewpoint is. Langacker (1987) remarks that a viewpoint consists of orientations and vantage points. The next illustration shows two viewpoints VP 1 and VP 2.

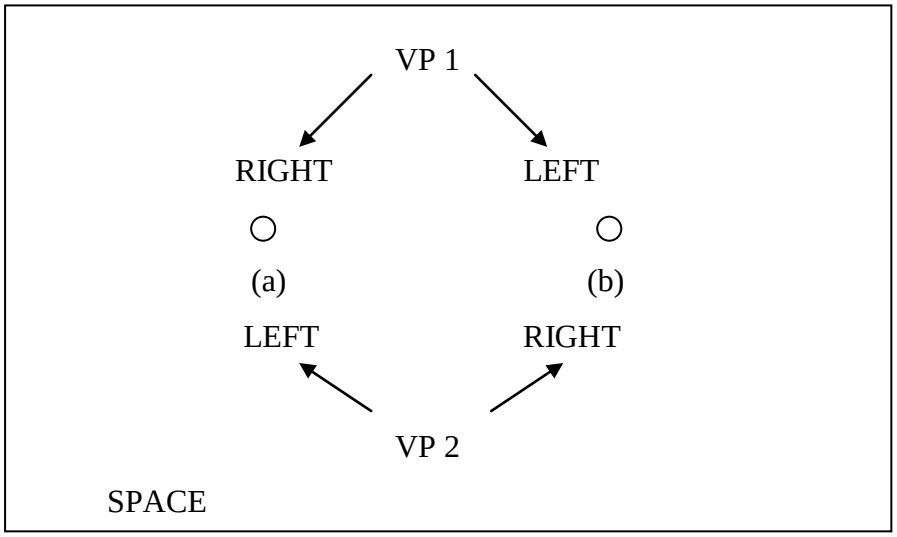


Figure (4.8): LEFT-RIGHT in the domain SPACE from two viewpoints

From VP 1, (a) becomes right and (b) becomes LEFT. However, LEFT and RIGHT from VP 1 are the opposite of that from VP 2. That is, LEFT-RIGHT schema is a relative concept, where it is not until a viewpoint is fixed that LEFT-RIGHT can be decided.

The difference between the type of CENTRE-PERIPHERY schema and LEFT-RIGHT schema corresponds to two major semantic subfields in spatial languages proposed by Levinson (2003:65): one is ‘‘coincidence’’ and another is ‘‘coordinate systems’’. Coincidence is the non-angular specification of location such as place names and deictic expressions. Coordinate systems, in contrast, need angular specification for location such as front-back and left-right.[11]

Since this study is about spatial demonstratives, I will not deal with the coordinate systems of spatial expressions, and will instead concentrate on coincidence.

[11] In addition to left-right relations, there is another system apart from the one seen in Figure (4.8). According to Levinson (2003), LEFT in ‘the ball is left of the tree’ is a relative coordinate system because the possibilities of LEFT depend on the angles of VP, while FRONT as in ‘the ball is in front of the TV’ is an intrinsic usage, because normally FRONT of the TV means that the angle is fixed in the object itself. Furthermore, there are languages which use an absolute system, in which a location is specified, e.g., ‘the ball is north of TV’, where NORTH is used as an absolute direction.

4.4 A case study of depicting demonstrative features in Langacker (2008)

As a case study of the cognitive approach, it is useful to examine the model of semantic characterization for demonstratives set out in Langacker (2008:281-4). I will start from the perspective of how the cognitive approach captures discourse. First of all, we can set up a domain called the ‘‘current discourse space’’ (abbreviated as CDS), in which we posit that all relevant linguistic phenomena are shared by a speaker and a hearer. The speech event normally comprises its participants (speaker and hearer), their interactions, and the immediate circumstances (a place and a time), which cognitive grammar calls ‘‘ground’’ (G). Let us look at a discourse model in the following figure.

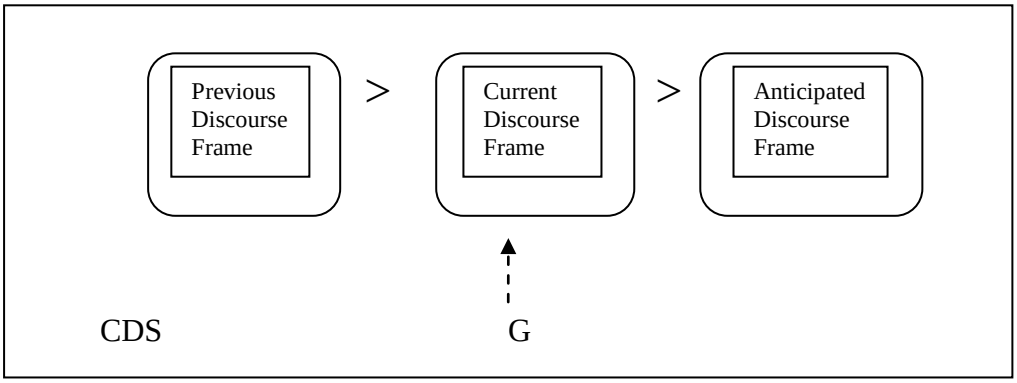


Figure (4.9): Setting a current discourse space

In Figure (4.9), the discourse process is sketched using discourse frames, which are certain portions of the CDS specially evoked and are negotiated by discourse participants; they also stand for time proceeding from the previous to the anticipated. Let us suppose a general schema of singling out a particular referent.

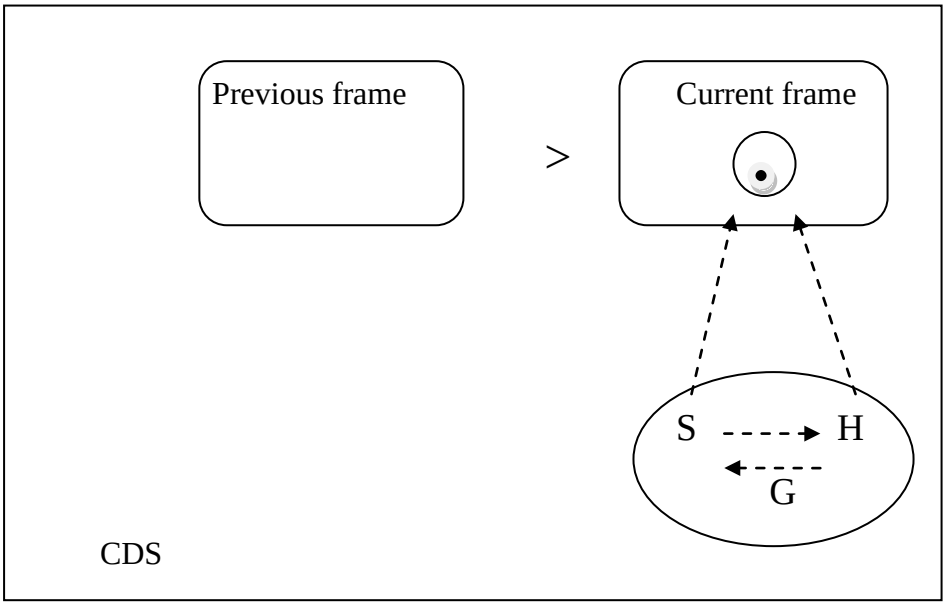


Figure (4.10): Singling out a referent

In the ground, a speaker (S) and a hearer (H) are interacting, which is indicated by mutually directed arrows between S and H. Another two arrows from the interlocutors momentarily direct their attention to the same instance, which is a potential referent in the current discourse frame, represented with a black dot in the current discourse frame.

If a deictic expression chosen by the speaker is a demonstrative, such as *this* in English, the schema can be described as follows:

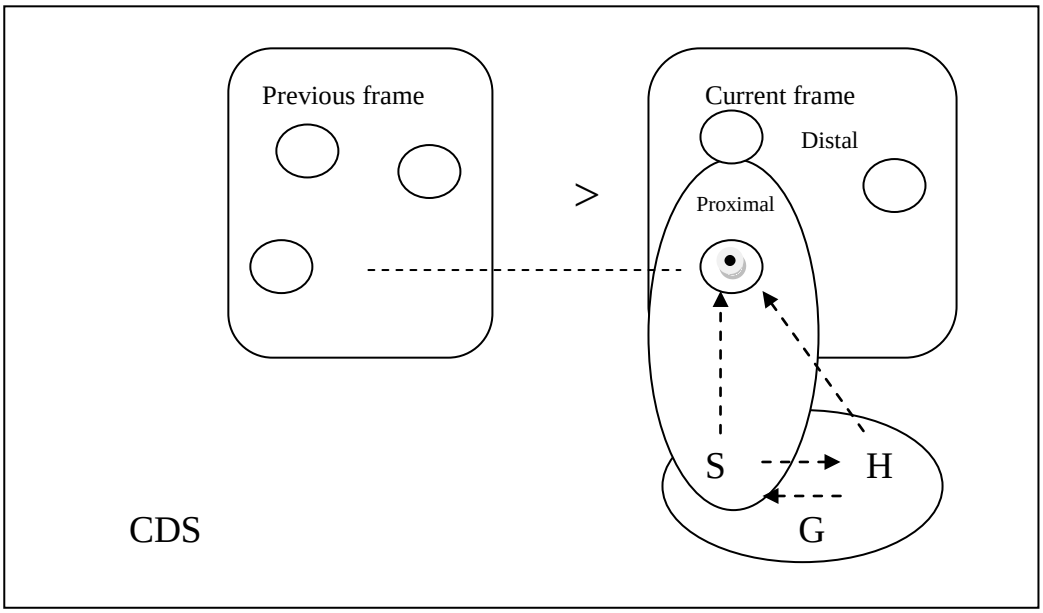


Figure (4.11): Demonstrative *this*

Among several discourse entities which are candidates (represented by empty circles) from the previous discourse frame, *this* can identify a particular referent (the circle with a black dot) with the value [proximal] in the current discourse frame, which is not only spatial (the referent is physically close to the speaker in a construal), but it might be temporal (the referent is close to the speaker in terms of time) or attitudinal (a speaker likes it).

This is one simple case of representing demonstratives by virtue of the cognitive approach but it also shows how we can visualize discourse processing and select a prospective referent from possible choices using features of demonstratives.

4.5 A case study of the depiction of specificity of reference in the theory of Mental Spaces

The preceding section illustrated how a demonstrative expression singles out a particular referent with [proximal] or [distal] in the current discourse as represented by a cognitive approach. This section will present another important cognitive concept for describing referential phenomena, Fauconnier's (1985) theory of Mental Spaces.[12] The term ''Mental Space'' denotes a similar notion to ''domain'', and can function as ''backstage cognition'' and represent conceptual structures in the speaker's mind.[13] I will demonstrate how Mental Spaces can depict specificity of reference.

Concerning Japanese demonstratives, the *SO*-series can have both specific and non-specific readings, which I will illustrate in 6.3.1.2. The theory of Mental Spaces will be used to explain the motivation of a deictic contrast in 6.3.1.2, alternations between the *–ko* and *–re* suffix in 7.2 and a conceptualization of a complex temporal expression with *sokora* in 7.3.8.1.

First of all, I will explain how the notion ''Mental Space'' works. The significance of using Mental Spaces is to identify between referents and referential expressions in conceptual ways, that is, without referring to the entity in the real world. Generally, in considering

[12] Sweetser and Fauconnier (1996:8) remark: ''The theory of Mental Spaces provided a model of the connection between semantics and cognition…and offers theoretical concepts intended to account for the regularities observed in the cognition-language relationship…Mental Space theory can thus elucidate a wide range of linguistic and philosophical problems, from the difficulties of indirect reference… to choices of grammatical construction, of tense or aspect, and of pronoun form.'' Mental Space theory is also used for analysing counter-factual conditions. In the study of Japanese, the theory of Mental Spaces has been applied to analyzing various linguistic phenomena including demonstratives in Discourse Management Theory (Kinsui and Takubo 1991, 1992). Concerning other graphical representations of cognitive semantics, see Schalley (2004).

[13] I will demonstrate the difference between a domain and a Mental Space in 7.3.8.1.

reference, it is assumed that linguistic expressions refer to something real in the world. However, the theory of Mental Spaces sets the real world in the speaker's mind as a ''reality space''. Let us illustrate this by means of the following sentence:

(1) In Len's mind, the girl with blue eyes has green eyes.

In terms of truth-conditional semantics, the proposition of the statement is not true in the real world, because there is no actual referent such that there is a girl with blue eyes who has green eyes at the same time. However, it can be true in someone's belief such as ''in Len's mind'' in (1).

When the above sentence is considered from the perspective of Mental Spaces, it is not necessary to judge whether the referent in the sentence exists in the real world or not. Let us hypothesize two Mental Spaces in the mind of the speaker with respect to the above example, where one is the Mental Space for the speaker's real world (*the girl with blue eyes*) and the other is the Mental Space for Len's beliefs (*the girl with green eyes*). I will depict them by using Fauconnier's model (1985:14):

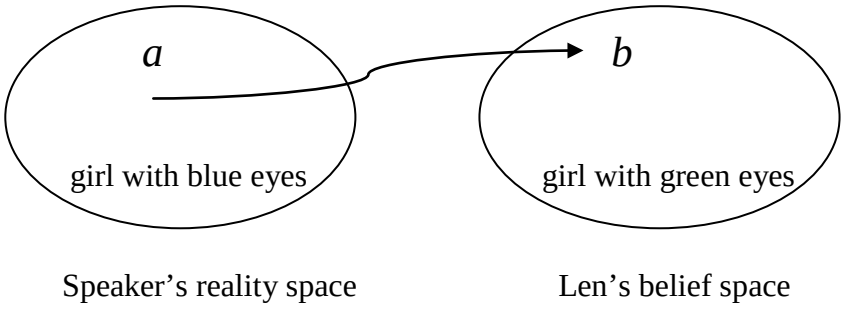


Figure (4.12): Linking between two Mental Spaces

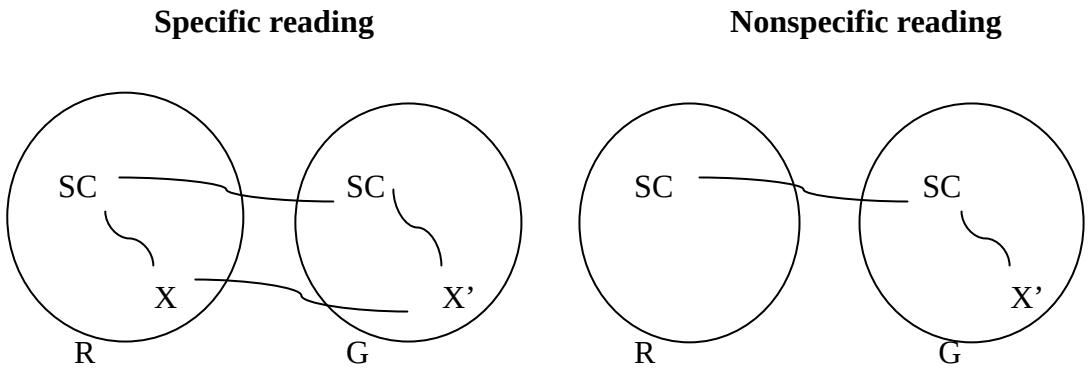
The two circles represent Mental Spaces (the speaker's reality space and Len's belief space) and the arrow from *a* to *b* is the connector between the two expressions, which indicates that the girl with blue eyes in the speaker's reality space is identified with the girl with green eyes in Len's belief space. Thus, the real world and Len's belief can be represented by two Mental Spaces in the speaker's mind, where two different expressions (the girl with blue eyes and the girl with green eyes) can be connected and identified with one referent.

Next, I will exemplify how specificity of reference can be described by Mental Spaces. Consider the following sentence:

(2) Gina wants to buy a sports car.

For (2), we can have two interpretations: a specific reading and a nonspecific one, depending on Gina's mind. If Gina has in mind a particular sports car which she wants to buy, the referent is specific, otherwise, there is no specific referent. That is, the Mental Space model can describe specificity using the relations between Gina's ''reality space'' and Gina's ''want space''.

In order to map between two Mental Spaces, Fauconnier (1985) introduces the notions of ''role'' and ''value''. Croft and Cruse (2004:34) remark: ''Roles can be a category or type with various instances or tokens; sports car is such a role since there are many instances (values) of sports car.'' Croft and Cruse (2004:35) present the following diagrams for the example ''Gina wants to buy a sports car.''



R: reality space
G: Gina's want space
SC: sports car (role)
X: a particular counterpart of a sports car (value)

Figure (4.13): Specific and nonspecific readings

Figure (4.13) shows two Mental Spaces (one reality space and the other Gina's want space) in both specific and nonspecific readings of the examples. The lines indicate the connection between the symbols. The crucial difference between the two readings is represented by the

presence or absence of X in the reality space, where X represents a particular instance of a sports car. In the nonspecific reading, Gina can imagine a sports car as a type she wants, but has not identified it with any existing car (there is no instance X in the reality space with the non-specific reading).

The theory of Mental Spaces provides a new way of representing specificity, where the specific and nonspecific distinction of reference is defined as the lack of a counterpart (value) of a role in the reality space in contrast with another space.

4.6 The difference between cognitive and formal approaches

Finally, I will briefly mention the alternative approach of generative grammar. In general, the cognitive approach seems to stand against the generative grammar from both philosophical perspectives and methodology. In fact, we can see crucial differences between them. Especially, the way of thinking about linguistic ability is decisive, because the generative approach aims to prove the existence of an autonomous and innate linguistic faculty, whereas the cognitive approach contemplates linguistic abilities as they are related to general cognitive abilities (cf. Lakoff 1987, Langacker 1987, and Pinker 1994). To adopt the cognitive approach in this thesis, I view linguistic abilities as influenced by other cognitive abilities. One of the purposes of this research is therefore to find patterns of conceptualizations through using languages.[14]

In terms of judging (un)acceptability of a particular expression, there are also differences between the cognitive and generative approaches. Generative grammar attempts to make rules to account for the acceptability of expressions, while the cognitive approach tries to search for motivations for language uses (Taylor 2003 and Croft and Cruse 2004). The thesis takes the second approach.

[14] Concerning approaches that are in–between the cognitive and formal approaches described here, see Newmeyer (1998).

4.7 Summary

In this chapter, I have presented several fundamental terms from cognitive approaches including construals, domains, concepts, profiles and image schemas. In the next chapter, I will analyze Japanese spatial demonstratives using these key notions of the cognitive approach.

Chapter 5 Cognitive semantics of the *–ko* suffix in the exophoric use

5.1 Introduction

In this chapter, I will study the semantic structure of the *–ko* suffix in the exophoric use from the cognitive approach. Central meanings of the *–ko* suffix are mainly realized in the exophoric use, because, as hypothesized in typological analyses (Himmelman 1996, Lyons 1999, Croft 2002 and Diessel 1999, 2006), meanings of the other uses such as the anaphoric use and discourse deictic use can be considered derivations of the exophoric use.

Let us first clarify some terminologies of semantic analysis, in addition to the cognitive notions presented in the last chapter, since various semantic terms such as ‘‘denotation’’, ‘‘connotation’’ ‘‘intension’’, ‘‘extension’’, ‘‘index’’ and ‘‘sense’’ are used in several disciplines.[1]

Generally speaking, a *word* is composed of the *signifier* (sound or form) and the *signified* (meaning) as indicated by Saussure (1959).[2] In this case, *form* and *meaning* can be understood as two inseparable aspects of a *word*. Contrary to this binary view of a linguistic sign, Ogden and Richards (1923:11) propose the following semiotic triangle for characterizing ‘‘meaning’’ (the broken line indicates an indirect association):

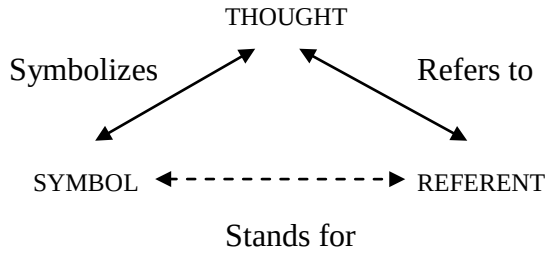


Figure (5.1): Ogden and Richards’ semiotic triangle

In the diagram, three factors (SYMBOL, THOUGHT, and REFERENT) are involved whenever any statement is made, or understood. These are placed at the corners of the triangle and the relations which hold between them are represented by the sides (Symbolizes, Refers to, and Stands for).

[1] Sense relations, whereby, for example the meaning of *boy* is determined by relevance to other words such as *girl*, *man*, and *child*, do not conflict with the cognitive approach, where a concept is profiled among related concepts in a domain.
[2] In Saussure (1959), the *signified* is considered to be a *concept*, not a *referent*.

According to Frawley (1992:7-18), this is a representative position of a conceptualists' view, where a relationship between a symbol (word) and a referent (concrete object) is mediated by a thought (abstract meaning). This perspective is called the indirect view. As Ogden and Richards (1923:12) note, there are some exceptions in which a symbol and a referent can be more directly connected, for example when a symbol is a proper name, onomatopoeic or used with gestures and drawings.[3] This point is also important for the analysis of the pragmatic function of spatial demonstratives. I will discuss the cognitive and pragmatic facets of ''deictic pointing''[4] in 6.1.2.

As presented in the previous chapter, the cognitive approach presupposes that ''a concept is a mental unit and a domain is the background knowledge for representing concepts'' (Clausner and Croft 1999:1-3). Therefore, applied to the Ogden and Richards' diagram, THOUGHT includes both 'definition' types of meanings (concepts) and encyclopaedic meanings (domains).[5] Some traditional approaches of semantics assume that ''meaning'' is reference to facts or objects in the real world. However, cognitive approaches propose that reference takes place within a mentally-projected world, the world that is construed. For example, Frawley (1992:21) states:

> The semantic representation of a single form, say a word, is composed of semantic properties that in conjunction fix reference of the form. We concentrate on how intension fixes the reference of a form, by selecting properties or components of a referent in a projected world.

The main points of the cognitive semantic analysis of the *–ko* suffix in this thesis, therefore, are to answer the questions: (i) what can the *–ko* suffix represent, (ii) what kind of properties can the representation of the *–ko* suffix denote, and (iii) how can the properties (intensions) of the representation of the *–ko* suffix be related with the properties (extensions) of a referent. In other words, describing the relationship among three corners of the Ogden and Richards' diagram is **how the speaker can construe a particular referent by means of a concept and its form**.

[3] Concerning the relationship between a symbol and a referent in cognitive and typological approaches, see works of iconic expressions of conceptual, linguistic and social distance in Haiman (1983).
[4] Concerning the relationship between deictic pointing and demonstratives, see ''Joint Attention'' in Diessel (2006).
[5] In philosophy, the difference between definition types of meanings and encyclopaedic meanings is often seen as a difference between *denotation* and *connotation*.

Regarding terminology, we can rephrase a conceptual representation as an ‘‘**entity**’’ (which will be explained in the next section), a concept as an ‘‘**intensional property**’’ and the relationship between a concept and a reference as an ‘‘**extensional propert**y’’.[6] Additionally, let us use expressions such as ‘‘represent’’ or ‘‘signify’’ for ‘‘symbolize’’, and ‘‘designate’’ for ‘‘refer to’’ as seen in the following diagram:

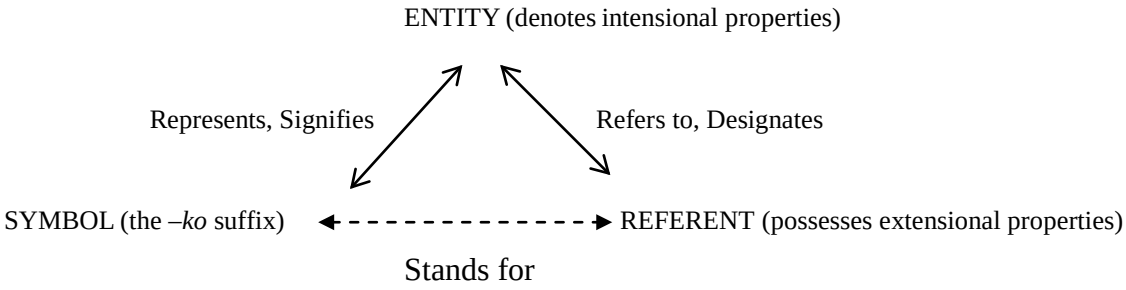


Figure (5.2): Extending terms in Ogden and Richards’ semiotic triangle

Interestingly, we can see that the corner labelled SYMBOL (as a form and a sound) is perceptual, the corner labelled ENTITY is conceptual in the speaker’s mind, and the corner labelled REFERENT is conceptual and possibly perceptual (if it physically exists).

As pointed out in the literature review, the previous research that has been conducted based on the combination of *KOSOA* and the *–ko* suffix cannot extract the essential meanings or intensions of the *–ko* suffix itself and can only classify extensions of spatial referents in the forms *koko*, *soko* and *asoko*. However, unless combined with the deictic part *KOSOA*, the *–ko* suffix cannot designate any referents on its own. In other words, what the *–ko* suffix can do is simply represent or symbolize a particular entity in the mind.[7]

In order to solve this double bind, I will take the following steps: (i) investigate intensional properties of the *–ko* suffix in terms of how they categorize an entity, (ii) transfer the intensional properties (abstract meanings) of the *–ko* suffix into extensional ones (referential meanings) through the deictic centre in the form of *koko*, and (iii) extract schematic patterns of the *–ko* suffix (*koko*) for classifying extensional properties of spatial referents.

[6] In the taxonomy of Lyons (1995), ‘‘denotation’’ and ‘‘reference’’ are distinguished in terms of ‘utterance-independent’ and ‘utterance-dependent’, respectively.
[7] Similarly, the reason why bound morphemes and grammatical words cannot be realized independently is hypothesized to be, because their meanings stay at the level of concepts.

5.2 The *–ko* suffix and PLACE

5.2.1 Entities

The term ‘‘entity’’ is often used in a general way as follows:

> Lyons (1995:297): At the limit of generality in English is the word ‘entity’, which can be used to refer to physical and non-physical objects and is derived from a Latin word which was deliberately created by philosophers to have exactly the degree of generality that it does have.
>
> Langacker (1987:198): the term entity must be understood in a maximally general sense. I use it as a convenient cover term for anything we might conceive of or refer to for analytical purposes: things, relations, locations, points on a scale, sensations, interconnections, values, etc.

However, as I mentioned earlier, I will employ the term **entity** as a conceptual representation, in order to be differentiated from a **referent**, which has a concrete or abstract individual token; entities are potential referents of any category (PLACE, THING and TIME) and referents are realized by means of the speaker’s construal. Both an entity and a referent are products of **conceptualization**, but an entity is related to a **categorization** of concepts and a referent is related to a **construal** of an utterance situation.

In past studies of spatial demonstratives, the *–ko* suffix has been generally recognized as expressing entities with a semantic feature [place]. However, cognitive semantics adopts a completely different point of view, which presupposes that **the *–ko* suffix represents a mental entity and is used to categorize a mental entity as PLACE.** In other words, it is not just that [place] is an objective feature belonging to an entity, but PLACE is subjectively categorized with conceptual properties in the speaker’s mind.

In considering meanings of the *–ko* suffix in the cognitive approach, we pursue two specific questions: (i) how can we categorize an entity as PLACE and (ii) what kind of intensional properties does PLACE have.

5.2.2 Syntactic constructions for the semantic features [thing] and [place]

As introduced in Chapter 1, Japanese demonstratives have pronouns with the qualitative suffixes, *–ko* [place], *–re* [thing], *–itsu* [person] and *–tchi* [direction]. Of these, the *–tchi* suffix represents an event rather than an entity, because the conceptual meaning of the *–tchi* suffix is a mental tracing from a reference point. The *–itsu* suffix signifies a human entity, whereas the *–re* suffix and the *–ko* suffix can be grouped together as representing non-human entities. Before examining the conceptual properties of the *–ko* suffix, let us consider the relationship between entities and Japanese demonstratives in terms of general semantic features in several syntactic constructions.

Previous studies have classified the role of the *–re* suffix as denoting [thing] and the role of the *–ko* suffix as denoting [place]. As often pointed out (Teramura 1993a, Takubo 1984, and Ikegami 2007), whereas other languages may have gender or number marking, Japanese possesses several linguistic features that are grammatically sensitive to types of nouns, especially to [place] or [thing].[8] Teramura (1993a) suggests several syntactic constructions of nouns,[9] which are based on complementary distributions of potential meanings of entities with [thing] or [place] as follows:

(i) {**Kore/Koko**} wa NP da {thing vs. place}
KOre KOko TOP COP
'{This/This place} is a NP'

(ii) X ga {**Place/Thing no tokoro**} ni kuru/iku. {thing vs. place}
NOM GEN place LOC come go
'X go/come to {place/thing}'

According to Teramura's proposal, almost all nouns can occur in the syntactic construction *Kore wa* NP *da* 'This is a NP', within which a NP has the feature [thing]. However, only nouns which have the feature [place] can fit in the *Koko wa* NP *da* 'This place is a NP'.

[8] In addition to grammatical sensitivities to [thing] or [place], Teramura (1993a) also indicates that Japanese shows a grammatical distinction between [animate] and [inanimate] for the choice of existential verbs, e.g. in the construction that Place *ni* NP *ga* {iru/aru} 'there is NP in/at/on Place', where *iru* 'exist' is used for [animate] and *aru* 'exist' for [inanimate].

[9] Concerning the syntactic difference between an entity and a referent, an entity is realized as a noun and a referent as a nominal in Lyons (1977) and Langacker (1987).

Therefore, it is supposed that identificational copula sentences[10] with demonstrative pronouns can be used to test whether the semantic feature of a NP in that syntactic construction is [thing] or [place].

As Teramura remarks, the *–re* suffix has a wider distribution in discourse than the *–ko* suffix. The data of this thesis (CAT and WORLD) shows the following difference of numbers of the *–re* and *–ko* suffixes used in texts.

Table (5.1): Comparison of frequency of use the *–re* suffix and the *–ko* suffix

		KO	*SO*	*A*	total
CAT	*-re*	476	612	87	1155
	-ko	98	73	14	185
WORLD	*-re*	255	1874	52	2181
	-ko	276	299	15	580

Of the other syntactic construction in (ii) represented by {[place]/[thing] *no tokoro*} *ni kuru*/*iku* in Japanese (equivalent to come/go to [place]/[thing] in English),[11] Japanese has a strong restriction on the choice of nouns; if the construction takes [thing] (including [human]) such as *watashi* 'I' and *tsukue* 'table', Japanese has to add the noun *tokoro* 'place' with the genitive marker *no* to the nominals: *watashi* ***no tokoro*** *ni kuru* 'come to me' or *tsukue* ***no tokoro*** *ni iku* 'go to the desk'.[12] Consequently, any nominal expressions without the *tokoro* phrase in the *come* and *go* construction in Japanese are assumed to possess the feature [place], e.g. *eki* (**no tokoro*) *ni iku* 'go to the station' or *tookyoo* (**no tokoro*) *ni iku* 'go to Tokyo'.[13] Since the spatial demonstratives *koko, soko* and *asoko* can occur without the *tokoro* phrase in the construction *ni iku*/ *kuru*, they are considered to possess the semantic feature [place].[14]

[10] The copula sentence is a type of sentence which is constructed as [X is Y] in English and [X wa Y da] in Japanese. When Y is a nominal expression, Y in the copula sentence functions as an attribute or identification (Lyons 1977 and Kuno 1973).

[11] Concerning locative expressions, locative prepositions in English and locative case particles in Japanese can have the same syntactic function.

[12] In contrast, the syntactic construction of *come* and *go* in English does not have strong selective constraints for nouns with [thing], [human] or [place] such as *come to the desk*, *you*, or *the station.*

[13] Takubo (1984) reports that Chinese and Korean also demand similar types of operations for *come/go* constructions as found in Japanese.

[14] In 7.3.6.2, I will discuss *koko no tokoro* used as a temporal expression.

5.2.3 The gaps between the semantic feature [place] and the *–ko* suffix

The above observations assume that we can determine in formal ways whether entities have the semantic feature [place] or not. However, a cognitive semantic approach points to some counterexamples which suggest a different perspective is needed.

Firstly, as Teramura (1993a) and Takubo (1984) pointed out, it is generally correct that *come/go* constructions in Japanese cannot be used to take human entities with a locative *ni* directly. However, according to Tsuji et al. (2002), if the referent of the object which moves is relatively smaller than a human, it is possible for a human entity to occur in this construction without *tokoro*, as in the following example taken from Tsuji et al. (2002:21).

(1) Taroo (no tokoro) ni tegami ga iku hazu desu. [T]
Taroo GEN place LOC letter NOM go should COP
'A letter should reach Taroo.'

In (1), a human referent *Taroo* with a locative case *ni* in the *come*/*go* construction is acceptable with or without a *tokoro* phrase. This type of expression is often observed in the discourse of sports commentaries such as in baseball games and soccer: *Ichiroo ni dakyuu ga iku* 'a hit flew to Ichiroo'. These examples show that human referents can be designated as PLACE in terms of metonymical extensions, where a baseball player's position is metonymically represented by his name, an issue I will discuss in 7.2.5.2.[15]

Thus, it is not a rule but a matter of construal that *come/go* constructions in Japanese demand *tokoro* phrases for entities without the feature [place], since the relative size of the moving object influences a speaker's interpretation of whether human entities can behave as PLACE or not.

Secondly, let us examine another counterexample concerning the copulative syntactic construction *Kore wa* NP *da* 'This is a NP', where referents of *kore* (the *–re* suffix) normally do not have the feature [place] but rather that of [thing]. In example (2) from a story, the discourse participants are passing through the woods and see a small village. The speaker uses the *–re* suffix to refer to the village in ***Kore*** *ga sono basho da* 'This is that place' and the NP slot in the construction *Kore wa* NP *da* takes a place noun.

[15] Concerning metonymical extensions, the cognitive approach takes the view that metonymy and metaphor are important tools for conceptualizations (Lakoff and Johnson 1980). Yamanashi (1995) calls cases in which entities with PLACE function as metonymical extensions ''toponymy''.

(2) Nagai kyuuna sakamichi o hanbun bakari kudari ookiku magatte mori
long steep slope ACC half around descend wide curve-LINK woods
o nuketa tokoro de sono sekai wa dashinukeni bokurano me no mae
ACC through place LOC that world TOP suddenly our eye GEN front
ni shutsugensuru…‘‘**Kore** ga sono **basho** da. Kimi wa **koko** ni haitte
LOC appear KOre NOM that place COP you TOP KOko LOC enter-LINK
iku nda’’
go it is
‘After descending halfway down a long slope, curving widely and passing through the woods, that world appears in front of us. ‘‘This is that place. You will enter here.’’ ’
Umibe no Kafuka the 2nd vol. (p335)

In the canonical situation of this example, the *–ko* suffix is more felicitous than the *–re* suffix, evidenced by the use of the *–ko* suffix in the following sentence *Kimi wa **koko** ni haitte ikunda* ‘You will enter here’. However, as seen in the *come*/*go* construction in Japanese, syntactic rules can easily be overridden depending on the way in which a situation is construed.

Thirdly, the *–ko* suffix can express a referent without the semantic feature [place] in other constructions. Look at the following example in which the protagonist has picked up an object ‘the skull of an animal’ and is asked to read dreams from it. He says:

(3) ‘‘Boku ga **koko** kara furui yume o yomitoru toyuu koto wa wakatta
I NOM KOko from old dream ACC read called COMP TOP understood
yo’’…**Soko** ni wa nanihitotsutoshite tegakari rashiki mono wa
SF SOko LOC TOP not even one clue like thing TOP
miataranakatta. **Sore** wa tadano doobutsu no tookotsu datta.
could not see SOre TOP just animal GEN skull was
‘ ‘‘I understood that I have to read old dreams from here.’’… But there was not a single clue. It was just the skull of an animal.’
WORLD

In (3), the speaker holds the skull of an animal, which is normally considered [thing], because *tookotsu* ‘skull of an animal’ is perceptually a kind of object and is syntactically expected to take *tokoro* ‘place’ phrases in the *come*/*go* construction as in *tookotsu no tokoro e iku* ‘go to

the skull'. Both *koko* in the first sentence and *soko* in the second sentence can be substituted with *kore* and *sore* in the same pragmatic context.

A significant point shared by the counterexamples (2) and (3) is that they can allow alternations between the *–re* and *–ko* suffix without changing their referential tokens in the context of the utterances, regardless of whether referents possess the features of [thing] or [place]. If the same referents can be expressed using the *–re* suffix and the *–ko* suffix or if a referent without the feature [place] can be designated by the *–ko* suffix, how can the relationship between the meaning 'place' and the *–ko* suffix be defined?

The gaps between the semantic feature [place] and the *–ko* suffix in the above examples indicate that syntactic constructions cannot always be used to determine whether an expression possesses a specific feature or not. That is, as Langacker (1987:194) remarks: ''meaning is not objectively given, but construed''. We can hypothesize that **there is no referent possessing [thing] or [place] a priori and only the speaker can categorize an entity as THING or PLACE in a conceptual way**. In the next section, I will consider the meaning 'place' of the *–ko* suffix from a conceptual point of view, instead of testing its use with particular syntactic constructions.

5.2.4 Cognitive notions of entities: relationality and boundedness

Next, let us consider characteristics of entities in a conceptual way in order to classify types of entities and define intensions of the *–ko* suffix. First of all, I will introduce a relational/non-relational distinction (Croft and Cruse 2004:67) which is a constitutive property of entities for construals. A relational entity inherently implies the existence of another entity, while a non-relational entity can be conceived of without presupposing any other entity.

Relational/non-relational entities can be described using the base-profile relation presented in 4.3.3, where the concept TRIANGLE is a base and the concept OBLIQUE SIDE is a profile. We can restate this as follows: the concept TRIANGLE is a non-relational entity and the concept OBLIQUE SIDE is a relational entity, because the concept TRIANGLE can be represented independently, whereas the concept OBLIQUE SIDE must be denoted as a part of TRIANGLE, it is therefore a type of dependent concept. As Croft and Cruse (2004:16) mention, ''the canonical

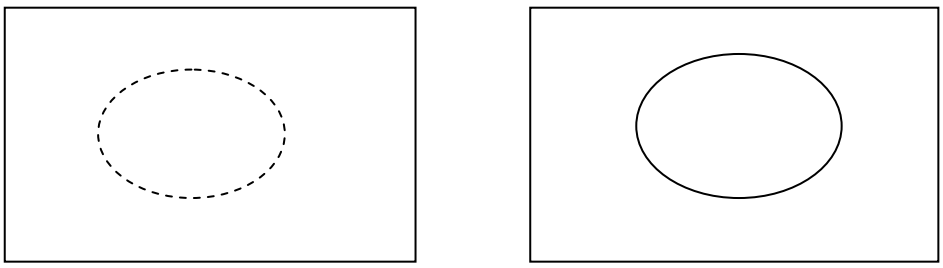
example of the profile-base relation is the part-whole relation'' and with respect to relationality two entities are generally expected to have a part-whole relationship.[16]

Secondly, let us observe a schematic structural property of entities called ''boundedness'' (Langacker 1987) which is related to whether or not entities are individuated (Croft and Cruse 2004:64). According to Frawley (1992:81),

> Some entities are inherently demarcated and come with their limits already specified. Such entities are said to be semantically ''bounded''. On the other hand, some entities are inherently open and denote uncircumscribed regions in conceptual space. These entities are said to be semantically ''unbounded''.

In terms of the notional characterization of grammatical categories, the bounded/unbounded distinction is hypothesized to motivate various sets of grammatical distinctions such as count versus mass nouns or singular versus plural forms of nouns as well as states versus processes or different tense/aspect forms of verbs (Langacker 1987, Frawley 1992, and Croft and Cruse 2004).

Let us depict the schematic structure of the boundedness of an entity in the simplest way as follows:[17]



unbounded bounded

Figure (5.3): Images of boundedness

[16] Kinship terms are also classified as relational entities, but they are not a part-whole relation (Croft and Cruse 2004:16).

[17] ''A domain that is highly ranked will be referred to as a primary domain.'' (Langacker 1987:165). ''A lexical unit is established by conventional usage as relating to one domain in particular, and its specification in this primary domain is obligatorily activated whenever the lexical unit is used'' (Rudzka-Ostyn 1985:238).

A region drawn with a broken-line indicates an unbounded entity and one drawn with a solid-line indicates a bounded entity. Boundedness is principally related to the primary domain and is virtual as well as real.

This thesis will use the concept ‘‘boundedness’’ in order to classify types of entities as THING or PLACE in 5.2.5 and the concept ‘‘relationality’’ in order to explain the types of schematic patterns of the *–ko* suffix in 5.3.8.

5.2.5 Intensional properties of THING and PLACE for entities

To understand the use of the *–ko* suffix, it is necessary to discuss how the same entity can be construed as THING or PLACE, regardless of its physical reality. In the previous section, we have given an overview of the notional property of ‘‘boundedness’’ of entities. Ikegami (2007:205) employs the concepts ‘‘bounded’’ and ‘‘unbounded’’[18] in Japanese to describe a crucial difference between the interpretation of THING and PLACE. THING is conceptualized as an individual entity discrete from environments notionally, whereas PLACE is not.

One of the important characteristics of boundedness is the possibility of **fuzziness** in some construals. The notion of fuzziness in previous studies of semantics has been employed in a number of different ways. The most common interpretation is that the boundary of categories is fuzzy, in that we cannot determine whether one entity is bounded or unbounded. Another interpretation is that a construal of a category is fuzzy, where members of a category are not equal and have gradations.

In our mental process, there are many cases where the boundedness of entities is not sharply determined (Langacker 1987:60). For example, Frawley (1992:82) points out:

> Consider the difference in bounding between the entity denoted by *county* and by *region*. The former has a sharply demarcated bound, defined geopolitically; the latter has no clear phenomenological bound, even though it is a bounded entity: *the region*, *four regions*, *a region*, and so forth. Bounding is fuzzy, and thus it is possible to override it (like all fuzzy categories).

[18] Ikegami (2007) calls them *kyookai* ‘bounded’ and *mukyookai* ‘unbounded’ in Japanese.

The fuzziness of boundedness is considered to be based on the fuzziness of speakers' conceptualizations, in which it is possible to construe the same referent in alternate ways. For instance, in the case of referring to ''chocolate'', a speaker may construe it as a bounded entity such as a unit of candy and say *a chocolate*, while s/he can also construe it as an unbounded entity such as a non-distributive material and say *much chocolate.*

As Langacker (1987) and Frawley (1992) point out, **boundedness can be fuzzy** between PLACE and THING in some construals.[19] Therefore, I will call what Ikegami calls ''unbounded'' ''**fuzzy bounded**''. Look at the following illustrations for PLACE and THING, where the broken-line indicates ''fuzzy bounded'' and the solid-line indicates ''bounded'' respectively.

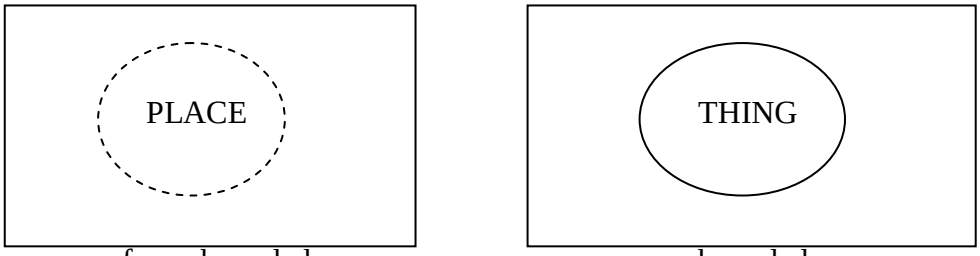


Figure (5.4): PLACE and THING

I will re-examine the difference of boundedness between the *–re* suffix as THING and the *–ko* suffix as PLACE based on the deictic centre in 5.3.4 and construal alternatives in 7.2.

5.2.6 The gradation of boundedness of entities

This section will demonstrate how the same referent can be construed either as PLACE or THING. For example, referents are prototypically conceived of as a 'place' which you can visit and where you can do things. However, they can be construed as THING when enumerated and pluralized by the *–ra* suffix.

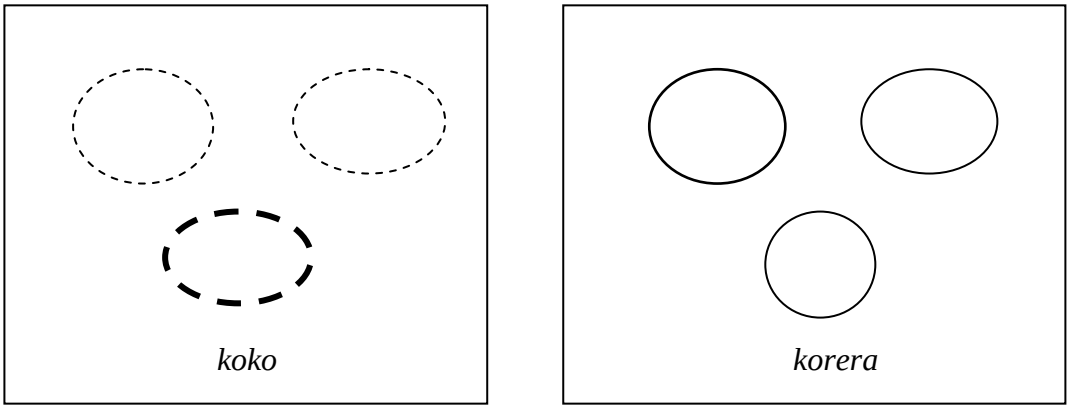
[19] For the same reason, Croft and Cruse (2004:95) suggests that the notion 'fuzziness' can be denied, because everything can be accounted for by variable construals of a determinate boundary. However, this thesis uses the notion 'fuzziness' for expressing gradations inside a category in addition to variable construals of a category boundary (construal alternatives). Furthermore, since the notion 'unbounded' sounds to be a binary notion, such as whether an entity is bounded or not, 'fuzzy' is a better notion than 'unbounded', in order to explain conceptual gradations within a category.

The *–ra* suffix can be recognized as marking plurals of pronouns such as *watashi-ra* (we), *anata-ra* (plural you), *kare/kanojo-ra* (they), and *koitsu-ra* (informal they). It can also suffix both the *–ko* and *–re* suffix. Let us consider the following example (taken from the Internet).[20]

(4) Inuboo eki ni tsuita. Inuboosaki ya chikyuu no maruku mieru
Inuboo station LOC arrive Inuboo-Point and Earth GEN round visible
oka tenbookan nado no moyori eki de ookuno kankookyaku wa
hill observation platform etc GEN close station LOC many visitor TOP
koko de geshasuru. Daga watashi wa **korera** ni itta koto ga nai
KOko LOC get off but I TOP KOrera LOC went COMP NOM not
shi
and
'I arrived at the station, Inuboo. The station is close to Inuboo-Point, and the hilltop observation platform where people can see the horizon, etc. Many visitors get off here. But I have not been to these places.'

In (4), we can observe *koko* 'this place' and *korera* 'these places'; both refer to what we usually conceive of as 'places'. The former refers to Inuboo Station and the latter refers to several places including Inuboo Point, the observation platform where people can see the horizon, etc. However, the former is referred to by the spatial demonstrative *koko*, while the latter is referred to by a non-spatial demonstrative in its plural form *korera*. The differences in forms seem to suggest the following different conceptualizations:

[20] (4) is taken from the Blog *Kimagure Tetsudoo Biyori* 'Good days for train journey'. URL: http://tetsudo.blog114.fc2.com/blog-entry-51.html



(i) *Koko* (Inuboo station) (ii) *Korera* (Inuboo station, etc.)

Figure (5.5): A different conceptualization between PLACE and THING

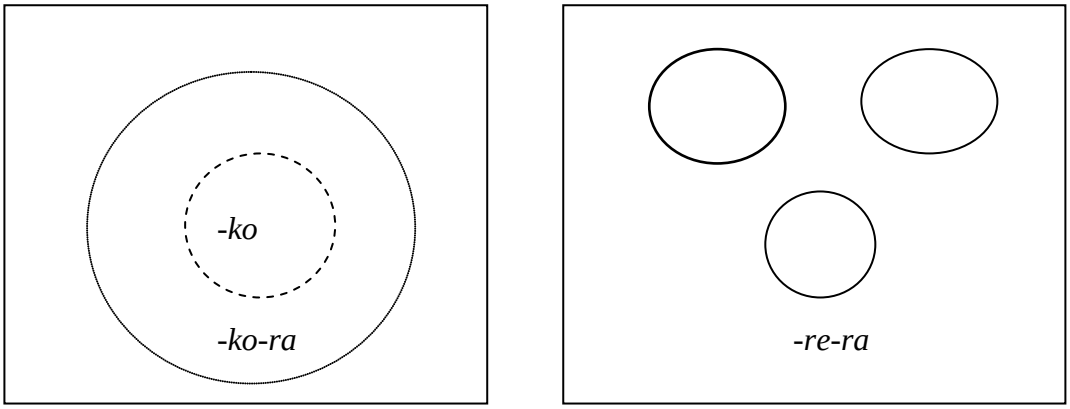
In (4), the speaker has several referents of PLACE in his or her mind. When profiling one PLACE, s/he can categorize the entity as being fuzzy bounded (PLACE) seen as in (i) of Figure (5.5), which is represented as the highlighted broken-lined circle. However, when conceptually enumerating several regions of PLACE, the speaker conceptualizes them as being bounded (THING) in (ii) of Figure (5.5), which is depicted as the solid-lined circle and marked by the *–re-ra* suffixes, instead of the *–ko-ra* suffixes. In other words, both demonstratives designate spatial referents in physical reality, but the speaker construe spatial referents in a mentally projected world in different ways: one as PLACE and the other as THING. Let us compare the following phrasal sequences of Japanese demonstratives.

(5) Kore to kore to kore, korera wa…
'This and this and this, these are…'

Koko to koko to koko, {*kokora / korera} wa…
'This place and this place and this place, these are…'

In the first example, the attachment of the *–ra* suffix helps conceptualize THINGs as multiple bounded entities represented by the *–re* suffix. However, in the second example, the multiple 'places' are being referred to as non-spatial entities with the *–re-ra* suffixes, in which the construal of PLACE is lost. The *–ra* suffix cannot follow the *–ko* suffix as in *kokora* to signify multiple PLACEs.

The expression *kokora* means 'around here', which indicates that **the *–ko* suffix with the *–ra* suffix can expand a fuzzily bounded region** (from 'here' to 'around here'), instead of enumerating all fuzzy bounded entities as *korera* can.[21] Let us describe the difference between them as follows:



(i) the *–ko-ra* suffixes (ii) the *–re-ra* suffixes

Figure (5.6): The *–ko-ra* suffixes and the *–re-ra* suffixes

These images display different schematizations. In the case of the *–ko-ra* suffixes, the *–ko* suffix and the *–ko-ra* suffixes conceptualize their regions at different levels, depicted by a normal broken-line (dashed) and by a finer broken-line (dotted) respectively in (i) of Figure (5.6). Both regions are not clearly bounded, but I will symbolize the level of fuzziness as the degree of fineness of the broken-line: the finer broken-lined circle of the *–ko-ra* suffixes represent a fuzzier entity than the normal broken-line of the *–ko* suffix alone.

In contrast, the *–re-ra* suffixes can change original PLACEs into THINGs by means of making entities bounded, and this is demonstrated by the solid-lines in (ii) of Figure (5.6). That is, when PLACEs are enumerated, even referring to 'generally perceived places', they are conceptually re-categorized as THINGs.[22]

[21] Concerning the plural form of *place*, there are other lexemes or phrases that can refer to more than one place such as *koo yuu tokoro* 'this kind of place' and *tokoro-dokoro* 'in places'. However, in *koko to koko to koko, koo yuu tokoro wa…* 'This place and this place and this place, these kinds of places…', the [koo yuu + general noun] construction is used for expressing a categorial type instead of a referential token. *Tokoro-dokoro* 'in places' do not refer to specific tokens; rather it refers to non-specific tokens. When pluralizing *tokoro*, it needs to be modified by the **–*re-ra* suffixes** such as *Kore-ra no tokoro* 'These places'.

[22] Concerning a generally conceived 'place', it is also important not to confuse perceptually bounded referents with conceptually bounded entities. For example, even if a speaker refers to a room, a stadium or any kind of **visually bounded space** by using the *–ko* suffix, s/he construes the referent as **conceptually fuzzy bounded**. Whether a referent is perceptually bounded or not as a generally conceived place is not an ultimate factor in the construal by the speaker.

Therefore, the fuzziness of boundedness can be established on two levels: one is the question of whether an entity is more like THING or PLACE, which is whether an entity is clearly bounded or not. It is relevant to the matter of conceptual contrasts including the selection of the *–ko* suffix or the *–re* suffix (I will discuss this issue in 7.2.2). The other is related to the gradation of boundedness of entities, which can be described as follows:

Table (5.2): Fuzziness cline of entities and the qualitative suffixes of demonstratives

The *–re* suffix	>	the *–ko* suffix	>	The *–ko-ra* suffixes
Bounded	◄- - - - - - - - - - - - - - -	- - - - - - - - - - - - - - -	- - - - - - - - - - - - - - -►	Unbounded
THING		PLACE		AROUND PLACE

Firstly, the region of the *–re* suffix is a clearly bounded entity construed as THING. Secondly, the region of the *–ko* suffix is a fuzzy bounded entity categorized as PLACE. Thirdly, the combination of the *–ko* and the *–ra* suffixes is much fuzzier, but is also categorized as a type of PLACE.[23]

5.2.7 Notional definitions of the *–ko* suffix and PLACE

From 5.2.2 to 5.2.6, we have discussed the differences between the semantic feature [place] characterized by a syntactic construction, and the conceptual PLACE based on how to categorize an entity: (i) the choice between the *–ko* suffix and the *–re* suffix is based on the speaker's construals, irrespective of the semantic features [thing] or [place] that are associated with particular syntactic constructions and (ii) the *–ko* suffix cannot represent multiple fuzzy bounded entities with the *–ra* suffix, even if they are referents generally conceived of as 'places'. That is, the cognitive notion PLACE does not always match up with the generally conceived 'place' as well as the semantic feature [place] from syntactic constructions.

As illustrated before, there is no referent that possesses the semantic feature [thing] or [place] a priori and only a speaker can categorize an entity as THING or PLACE in a conceptual way in 5.2.3. This is a reason why we have to be careful to distinguish a

[23] I will discuss the *–ko-ra* suffixes employed as a temporal expression in 7.3.8.1.

conceptually determined PLACE from the semantic feature [place] (syntactically determined) or a generally conceived 'place'.

Finally, I will define the abstract meanings of the *–ko* suffix and the cognitive concept PLACE in conceptual ways: (I) the semantic representation of the *–ko* suffix is **the unacceptability of representing bounded entities,** irrespective of whether entities possess the semantic feature [place] or not and (II) the intensional property of PLACE is **fuzzy bounded,** irrespective of whether spatial referents are generally conceived as 'place' or not. Therefore, we can state that (III) **the *–ko* suffix can signify fuzzy bounded entities as PLACE**.

The importance of describing the essential meaning of the *–ko* suffix as non-representation of bounded entities resides in the fact that the *–ko* suffix alone cannot cover the entire scope of fuzzy bounded entities, as the *–ko-ra* suffixes show that there is a subtype of fuzzy bounded entities.

5.3 Three schematic patterns of the *–ko* suffix

In the preceding section, we established the abstract meanings of the *–ko* suffix as semantic representations which focus on the relationship between cognitive characteristics of entities and the *–ko* suffix. Let us remind ourselves of Ogden and Richards' diagram in Figure (5.2), shown again below.

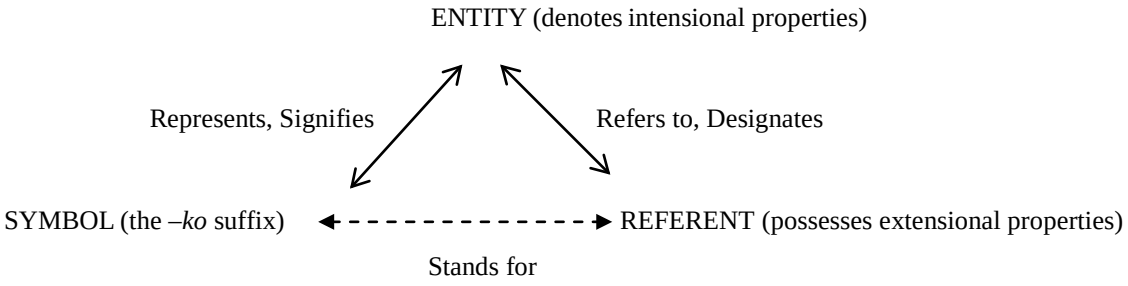


Figure (5.2): Extending terms in Ogden and Richards' semiotic triangle

In 5.2, we have discussed how the *–ko* suffix can signify conceptual properties of entities as its intensional properties. Figure (5.7) summarises the results of this examination.

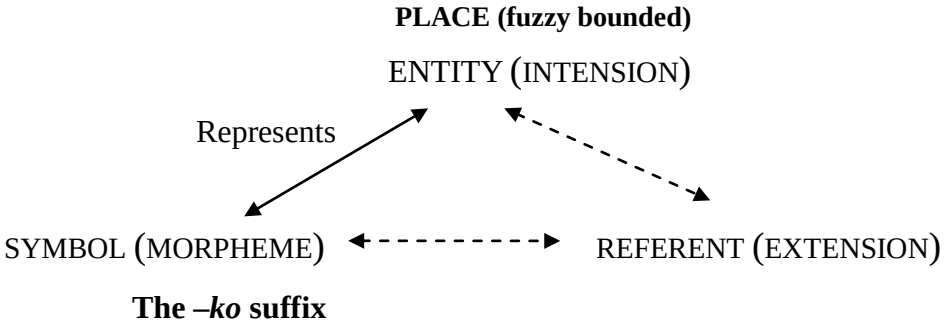


Figure (5.7): The semiotic triangle of the *–ko* suffix

At the corners where SYMBOL and ENTITY are located in Figure (5.7), we can rephrase MORPHEME and ENTITY (INTENSION) as the *–ko* suffix and PLACE (fuzzy bounded) respectively. The relationship between them indicates that the *–ko* suffix represents fuzzy bounded entities as PLACE. The solid lined arrow from SYMBOL to ENTITY displays the link between a form and a concept. On the other hand, two arrows from SYMBOL to REFERENT and from ENTITY to REFERENT are represented by broken-lines to illustrates that only the *–ko* suffix cannot designate any referent.

In 5.3, we analyze the conceptual meanings of the *–ko* suffix with referents, pursuing how referents are construed with the intensions of the *–ko* suffix. As mentioned before, a combination of one of the deictic parts *KOSOA* is obligatory for the *–ko* suffix to designate a referential token, which can be depicted as follows:

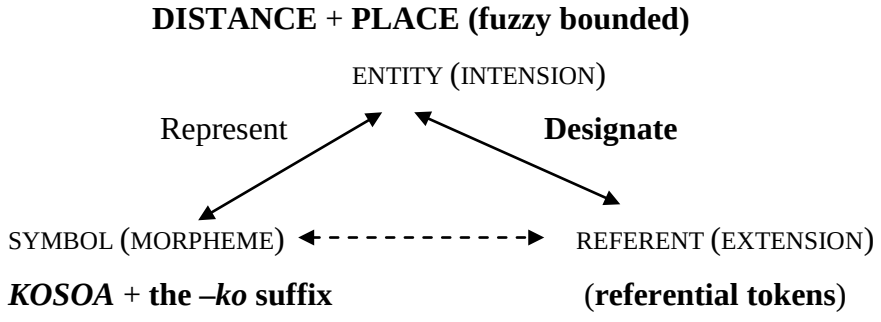


Figure (5.8): The semiotic triangle of spatial demonstratives

Compared with Figure (5.7), the deictic root of Japanese demonstratives *KOSOA* and one of its deictic concepts DISTANCE[24] are added to the corners of SYMBOL and ENTITY in Figure (5.8). Thereby, SYMBOL can be linked with REFERENT through ENTITY, which is depicted as the solid lined arrow from ENTITY to REFERENT. Although the *–ko* suffix alone cannot refer to anything, the combination of DISTANCE of *KOSOA* with PLACE of the *–ko* suffix (which is a spatial demonstrative in Japanese) enables language users to designate a particular token and to identify a referent.[25]

In order to examine the relationship between the cognitive characteristics of entities of the *–ko* suffix and referents of spatial demonstratives *koko*, *soko* and *asoko*, I will separate the intensional properties of the ***–ko* suffix** and the extensional properties of the ***–ko* suffix as a part of spatial demonstratives**: the former meanings are intrinsic concepts of the *–ko* suffix itself, while the latter are schematic patterns to designate referents realized by the combinations of *KOSOA* and the *–ko* suffix as a form of spatial demonstratives.

As seen in the literature review of Chapter 3, where the meanings of the *–ko* suffix are defined as 'near the speaker's place' for *koko*, 'hearer's place' for *soko* and 'far place' for *asoko*, the semantics of the *–ko* suffix are always mixed with the meanings of the deictic contrasts. Therefore, I will restrict the deictic part *KOSOA* to only the *KO*-series in the expression *koko* and abstract the *–ko* suffix's extensional properties without using the notion of DISTANCE and PERSON at first, and this can be considered to minimize the influence of deictic contrasts. Otherwise, discussion of the schematic patterns of the *–k*o suffix and its combinations with various deictic contrasts together would be too complex. In Chapter 6, I will scrutinize the relationship between extensional properties of the *–ko* suffix and deictic contrasts of *KOSOA*.

The reason why the *KO*-series among *KOSOA* is chosen for initial examination is that expressions of spatial demonstratives are determined by the relationship between the deictic centre and referents, and *koko* in Japanese as the form which represents the deictic centre can be a primal vantage point to designate referents. (Marmaridou (2000:100) remarks, ''the mental space evoked by a deictic expression involves the conceptualization of the deictic centre.'')

Before discussing the relationship between the deictic centre and the *–ko* suffix, I will present how ''deixis'' can be treated in the cognitive approach in the next section.

[24] Strictly speaking, DISTANCE is a relational entity and its intensional property is 'proximal or distal from the deictic centre'. In this chapter, I will temporarily define the prototypical meaning of *KOSOA* as DISTANCE. In the next chapter, I will discuss meanings of *KOSOA* in terms of various deictic contrasts.
[25] The same is true of *KOSOA*. Not only the *–ko* suffix, but also *KOSOA* are bound morphemes.

5.3.1 The semantics of deictics in Rubba (1996)

The cognitive and pragmatic notion ‘deixis’ has a long history of philosophical investigation. According to Lyons (1979:89), it was the psychologist Bühler (1990) who popularised the term ‘‘deixis.’’[26] In linguistics, Fillmore (1997, originally published in 1975), Lyons (1977), and Levinson (1983) adopted ‘‘deixis.’’ into the analysis of the pragmatics. In the cognitive approach, Langacker (1987) considers the concept of ‘‘deixis’’ to be related to conceptualizations based on the experiences of language users.

First of all, I will introduce a useful composite diagram illustrating deictics from the cognitive approach proposed by Rubba (1996:231). The illustration elucidates the elemental settings of a speech situation, where a discourse occurs between a speaker and a hearer; other entities including places and times are construed as variants according to a reference point and what is profiled.

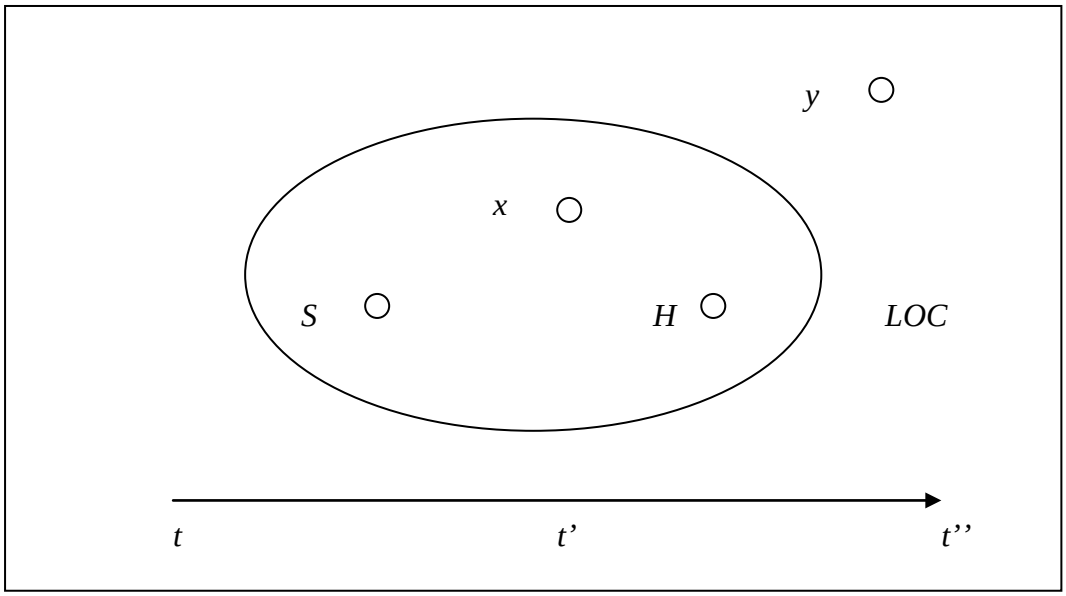


Figure (5.9): Deictic speech settings in Rubba (1996)

In Figure (5.9), *S* stands for the speaker, and *H* for the hearer; *t* labels the arrow representing time, and *t’* is the time of the speech event; *LOC* represents the location of the speech event and *x* and *y* stand for entities. The default ground of a speech situation in Figure (5.9) is

[26] Bühler (1990) is originally published in 1934. His contributions to semantics are significant, because he distinguished between two types of meaning in languages; one is symbolic and the other is deictic. That is, he recognizes a semantic distinction based on whether meanings can be related to the current discourse context or not. Furthermore, he subcategorizes deixis into two cases: (i) perceptible and (ii) imagery (deixis on phantasma). These various notions have been fundamental to understanding of deixis subsequent to Bühler.

construed as follows (Rubba 1996:232): profiling *S, H, LOC* and *t'* designates the expressions *I, you, here* and *now* respectively. In the large circle which indicates a field of [proximity] of the speaker, profiling an entity *x* would typically give the meaning of *this*. Shifting to the entity outside the large circle is construed as distal to the reference point, profiling an entity *y* would give the meaning of *that*, if *y* is a thing, or *there* if *y* is a location; and supposing we were to profile *t''*, we would have the designation of *then*. The merit of this composition is that it provides a total image of a setting for deictic expressions.

However, considering the deictic centre, the Figure displays excessive information. Therefore, I will exclude the elements ''hearer'' and [near] / [far] in order to highlight the deictic centre [I, here, now].

5.3.2 [I, here, now] as the deictic centre

Let us modify Rubba's model in order to extract core elements of deictic expressions, by virtue of removing ''hearers'' and entities with [near/far], which can show a simpler image of the deictic centre.

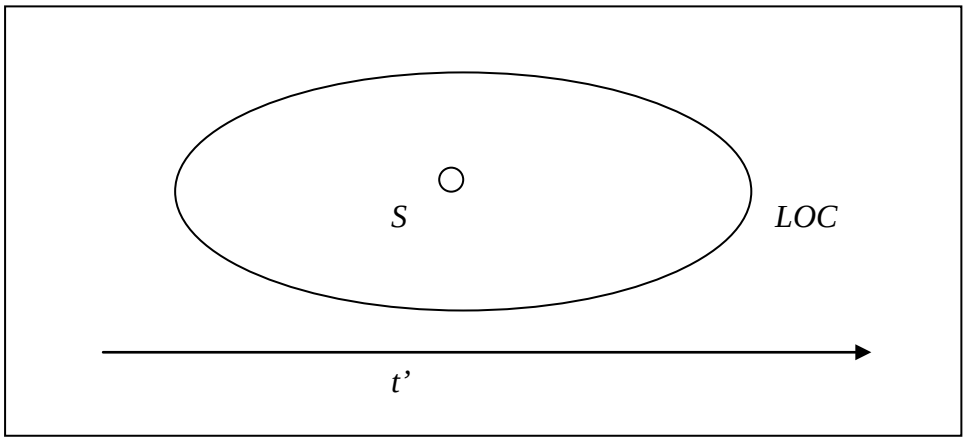


Figure (5.10): The setting of the deictic centre

In this Figure, three deictic elements remain: a speaker, a location with a speaker and a speech time. These are the central notions of deixis generally called the ''deictic centre'' (Levinson 1983) or ''egocentric'' (Lyons 1977).

Levinson (1983:64) proposes that the deictic centre is typically assumed to be the following:[27]

(i) The central person is the speaker.
(ii) The central time is the time at which the speaker produces the utterance.
(iii) The central place is the speaker's location at utterance time.
(iv) The discourse centre is the point which the speaker is currently at in the production of his utterance.
(v) The social centre is the speaker's status and rank, to which the status or rank of addressees or referents is relative.

Of these, (i), (ii) and (iii) are essential concepts for the origin of the deictic field, which is generally summarised as [I, here, now] (Bühler 1990:117).

According to Bühler (1990), when the following coordinate system is supposed in Figure (5.11), the centre of perpendicularly intersecting lines represents ''zero'' for the origin of the deictic field.

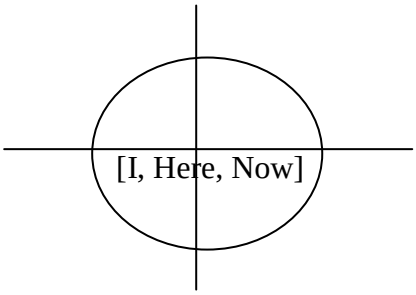


Figure (5.11): A representation of the deictic field in Bühler (1990)

Bühler claims that three deictic words must be placed at the central zero expressed by, *I*, *here*, and *now*. Using typical Japanese expressions for the deictic centre, this idea can be expressed in the following sentence:

(6) Watashi wa ima koko ni iru.
I TOP now KOko LOC exist
'I am here now.'

[27] This is based on Fillmore (1997:61), which was originally published in 1975.

In this existential statement, *watashi, ima* and *koko* refer respectively to the speaker, the time when the speaker pronounces the utterances and the space where the speaker exists, the components of which can be summarised as [I, here, now].

The deictic centre can also include hearers in the components [I, here, now]. From a typological and conceptual perspective, Diessel (2005:171) suggests that the deictic centre can be of two types: (i) it is the common domain of the speaker alone (excluding the location of the hearer) and (ii) it is the common domain of the speaker and hearer. I will discuss the latter case that the speaker construes the hearer inside the deictic centre in 6.1.3.

From the point of view of semantic universals, Wierzbicka (1996) states that [I, here, now] are semantic primitives, which means that they are not decomposable into lower level semantic components. In this study, I will acknowledge her statement that [I, here, now] of the deictic centre are semantic primitives. When I argue extensional (referential) properties of the *–ko* suffix in the deictic centre, it does not mean that the *–ko* suffix is decomposable into other **semantic components**; it means that the *–ko* suffix allows several **potential construals**.

5.3.3 The deictic centre and a reference point

Before discussing the relationship between the deictic centre and the *–ko* suffix, it is necessary to point out an important caveat about the relationship between the deictic centre and a reference point.

One important presupposition is that it is difficult to decouple the deictic centre from a speaker to other discourse participants and location in a canonical speech event, except in direct speech (quoted speech) and the historical present.[28] Let us illustrate a phenomena called ‘‘deictic projection’’ in Lyons (1977:579).

[28] For example, if a speaker says, ‘‘a teacher said, ‘come here!’’’, the place designated by *here* is not the deictic centre but the place where the teacher speaks. In this case, we can posit that the deictic centre shifts to the subject of a clause in direct speech from a speaker. Concerning a shifted deictic centre, Langacker (1991:266-8) illustrates some special cases for the use of the present tense including the historical present.

(7) (A speaker is in London and speaks to someone in New York.)
We are going to New York next week. [L]
We are coming to New York next week.
We are going there next week.
We are coming there next week.

All these expressions are felicitous.[29] According to Lyons (1977), the difference between *going* and *coming* in the above deictic expressions is that the use of *come* in English allows the speaker to project himself into a deictic context centred on the addressee. In terms of the cognitive approach (Langacker 1987:127), this kind of phenomenon is considered to be **changing a reference point** rather than shifting the deictic centre to a hearer, where using *go* focuses a reference point on the departure point and the use of *come* focuses a reference point on the goal (in this case, a hearer's place). The reason why this is different from shifting the deictic centre is shown in the fact that the following instance is inappropriate in the same situation as (7).

(8) (A speaker is in London and speaks to someone in New York.)
#We are coming here.

(8) is unacceptable because *here* indicates only the place where the speaker exists.

Both pairs *come* and *go*, and *here* and *there*, are deictic expressions. However, *come* and *go* can be used interchangeably in some contexts, while *here* and *there* can not. That is, the reference point can be shifted from a speaker to a hearer with *come* and *go*, while the deictic centre itself is fixed as the speaker's place. As seen in the Kikuyu data presented in 2.2.2.2, a reference point in discourse can be flexible and, since it is hypothesized to be based on construals, it does not need to overlap with the deictic centre all the time.[30]

From the above discussion, it can be hypothesized that the deictic centre does not move away from the speaker.

[29] Lyons remarks that some speakers of English find *we are coming there next week* unacceptable.
[30] In some analyses, this phenomenon is treated as multiple ''origos'' in various situations. See Fricke (2003).

5.3.4 The deictic centre and the *–ko* suffix of spatial demonstratives

Considering the relationship between the deictic centre and the *–ko* suffix of spatial demonstratives, the conceptual characteristics of entities such as boundedness can clarify the difference among the three components of the deictic centre [I, here, now]. First of all, let us simplify Rubba's model in the domain SPACE as follows (DC stands for the deictic centre):

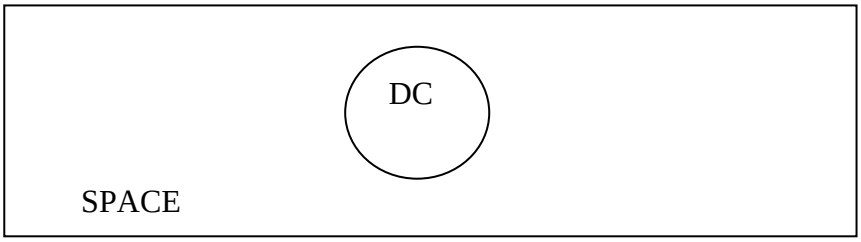


Figure (5.12): [I] of the DC is profiled in SPACE.

As seen in section 4.3.3, the domain SPACE must be SPACE for something. Therefore, the DC as a central point is one of the minimal concepts in SPACE. In Figure (5.12), the solid-line stands for the circle of the DC, which indicates that the entity in SPACE is conceptually bounded as explained in 4.3.3. When the deictic centre is represented as bounded, let us interpret it as profiling [I] of [I, here, now] in the DC.

Next, let us compare this with the following Figure.

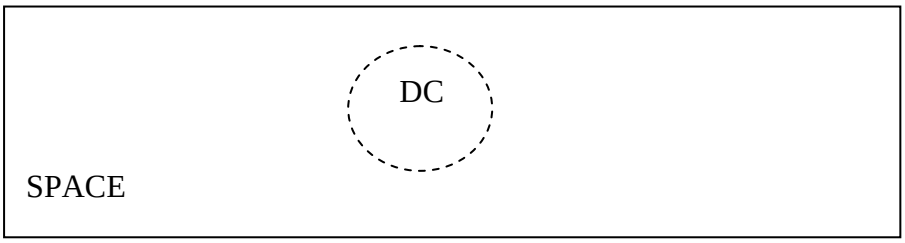


Figure (5.13): [here] of the DC is profiled in SPACE

In this Figure, the circle of the DC is depicted as broken-line, which represents the entity as fuzzy bounded. I will propose that, when the deictic centre is represented as fuzzy bounded, [here] of the DC is profiled. In this chapter, I temporally exclude [now] of the deictic centre from the illustrations and I will return to that issue, discussing the relationship between temporal expressions and the *–ko* suffix, in 7.3.

The significance of describing [I] and [here] of the DC separately resides in the fact that a speaker can pick out one component of the deictic centre at will and the way of profiling the deictic centre varies across languages. Let us compare interrogatives of location in English and Japanese. Observe the following examples, where a speaker asks his or her whereabouts (the symbol # indicates 'grammatically correct but pragmatically unacceptable').

(9) Where am I?

(10) #Where is here?[31]

(11) #Watashi wa doko desu ka.[32]
I TOP where COP Q
'Where am I?'

(12) Koko wa doko desu ka
KOko TOP where COP Q
'Where is this place?'

When asking about the location of the speaker, there is a crucial difference between English in (9) and (10) and Japanese in (11) and (12). English constructs the wh-question from the perspective of a speaker 'I' expressed by the subject position of a sentence, while Japanese forms the interrogative sentence by profiling the speaker's place of the utterance *koko* 'here' without expressing the first person. That is, the way to ask about the current speech location reflects different construals of each language user, depending on how the components of the DC [I, here, now] ('I' of the DC in English and 'here' of the DC in Japanese) are profiled.[33]

[31] A limited number of grammatically correct uses for ''Where is here'' are conceivable, for example to clarify someone's use of the word 'here'.
[32] If the sentence is used in a context that the speaker is looking for his/her place to sit, it is pragmatically acceptable.
[33] Ikegami (2006:183, 190) interprets this type of difference between English and Japanese in another way. He characterizes English as a type of ''self split'' language and Japanese as a type of ''ego-centric'' language. He remarks that English can use the same construction for asking the place of the second person or third person such as 'Where is s/he?' or 'Where are you?' as the first person 'Where am I', because English can put 'self' of the first person on the same status as that of the second and third persons. On the other hand, Japanese must employ different interrogatives for asking the location of a person: for the first person with the place-profiling construction *koko wa doko desu ka* 'Where is this place' and for the non-first person with the person-profiling construction *anata/kare/kanojo wa doko desu ka* 'Where are you?' or 'Where is s/he?'. Ikegami calls this unique status of the first person in Japanese ''ego-centric''. Niimura (2006) also suggests that Japanese deixis always converges to the consciousness of 'here and now' and is more speaker-centered than in English.

In the following, I will employ Figure (5.13) for representing the *–ko* suffix of the deictic centre *koko*.

5.3.5 Extending referents of the *–ko* suffix from the deictic centre

In the last section, we confirmed the relationship between the *–ko* suffix of spatial demonstratives and deictic centre as the primal referent, where *koko* is profiled out of the deictic centre [I, here, now] and represented as a fuzzy bounded entity in the domain SPACE.

In this section, I will examine the relationship between intensions of the *–ko* suffix and extended referents from the deictic centre as a schematic pattern for designating spatial referents, which will be defined as extensional properties of the *–ko* suffix of *koko*.

In order to specify extensional properties of the *–ko* suffix of *koko*, I will extract schematic patterns from several characteristic referents of the *–ko* suffix, and these will be represented as image schemas. The main point of the following sections is to clarify how the intensional property of the *–ko* suffix can be associated with image schemas to classify types of referents of the *–ko* suffix of *koko*.

First of all, let us start with *koko* of the deictic centre, which is the fundamental reference point in the domain SPACE. Observe the following example.

(13) (There are two people talking in a room.)

Ima tochuude gochisoo o atsuraete kimashita kara soitsu o hitotsu
now on the way dinner ACC arange-LINK came because it ACC one
koko de itadakimasu yo.
KOko LOC eat SF
'Since I have arranged dinner, I'll have it here.'
CAT

In (13), the *–ko* suffix of *koko* refers to the spatial zone just around where the speaker is. We can also observe that *koko* in this example is accompanied by another component of the deictic centre *ima* 'now'. The conceptual image of *koko* profiled out of the deictic centre can be depicted as follows:

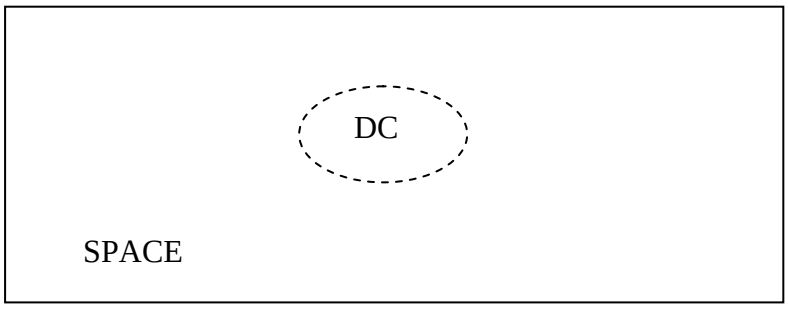


Figure (5.14): The minimal extension of the deictic centre

In Figure (5.14), the referent of the *–ko* suffix of *koko* is the exact spot where the body of the speaker exists and may be presumed to overlap with the original idea of the deictic centre [here].

One of the interesting characteristics of the minimal extension of the *–ko* suffix is that it does not allow *koko* to be rephrased with other spatial expressions. For example, since the place of *koko* in (13) is located in a street in a town in Tokyo in Japan, it might be expected that we can substitute the proper name of the street or town, or general place names modified by the demonstrative determiner *kono* 'this', but such a spatial expression is not pragmatically allowed in the context of (13) as the following shows:

(14) **Koko** de itadakimasu yo
KOko LOC eat SF
'I'll have it here.'

#**Kono michi** de itadakimasu yo
KOno street LOC eat SF
'I'll have it in this street.'

#**Kono machi** de itadakimasu yo
KOno town LOC eat SF
'I'll have it in this town.'

#**Shinjuku doori** de itadakimasu yo
Shinjuku street LOC eat SF
'I'll have it in Shinjuku street.'

#**Tokyo** de itadakimasu yo
Tokyo LOC eat SF
'I'll have it in Tokyo.'

Kono ba de itadakimasu yo
KOno place LOC eat SF
'I'll have it in this place.'

Instead of *koko* in *koko de itadakimasu yo* 'I'll have it here', only the general term *ba* or *basho* 'place' is acceptable with the demonstrative determiner *kono*. That is, the place in (14) is *koko* that can only be defined as the deictic centre itself. Therefore, we can consider the minimal extension of *koko* to correspond with the [here] of the DC.

Starting from the minimal extension of the deictic centre, let us gradually expand the spatial zone of referents designated by *koko*. The referent of the *–ko* suffix in the next example is inside a building.

(15) (A speaker is in a library.)
Boku wa **koko** ni yume o yomini kita ndesu.
I TOP KOko LOC dream ACC reading came it is
'I came here to read dreams.'
WORLD

Koko refers to inside the library. There is a crucial difference between this example and the minimal extension, which cannot be rephrased with other spatial expressions, in that *koko* in example (15) can be substituted with *kono toshokan* 'this library'. Compared with Figure (5.14) in which [here] and [I] of the DC coincide with each other, the following picture indicates that the spatial zone of *koko* (inside a building) encompasses [I] of the DC (represented by the solid-line circle).

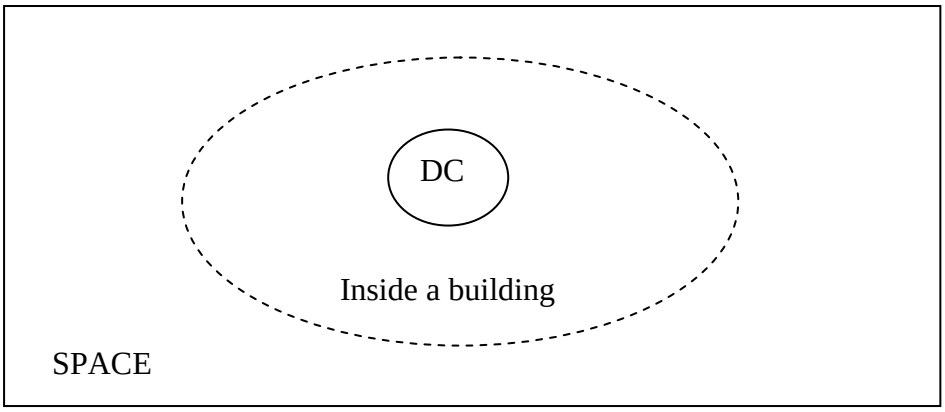


Figure (5.15): An extended referent inside a building

Regardless of the size of the building, this conceptual image can apply to any space inside a building from one room to the entire building, and can be expressed by *koko*, as long as it includes [I] of the DC.

It should be noted that the DC itself is depicted with a solid-line as profiling [I] of the DC. In contrast to the minimal extension of the DC in Figure (5.14), a referent of *koko* in Figure (5.15) extends outward from [here] of the DC, which is represented by the broken-lined circle and the surrounding radiated zone.[34] Let us modify Figure (5.15) as follows:

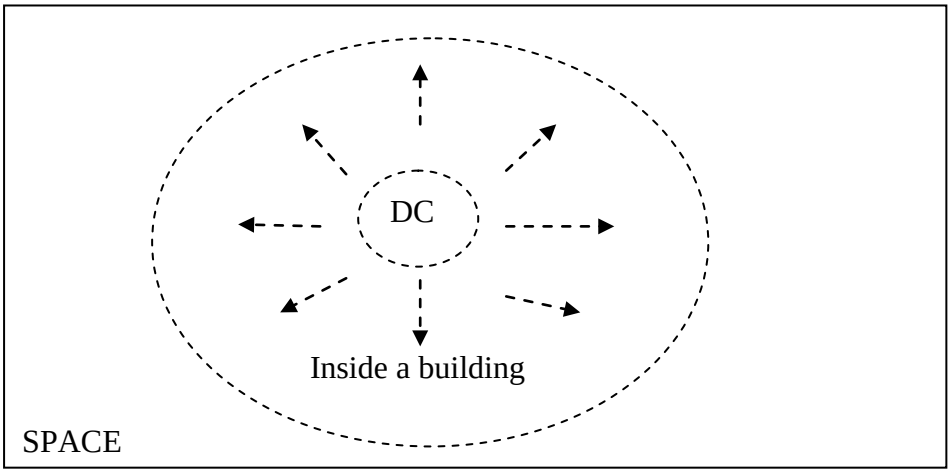


Figure (5.16): An image of a radiated zone from the DC

[34] In other words, the body of a speaker cannot be extended physically, but a space surrounding a speaker can expand freely, depending on construals or consciousness.

Figure (5.16) clarifies how [here] of the DC is extended to encompass the inside of a building through construals in a conceptual way, which are represented by the radiating broken-lined arrows.

Next, let us confirm various sizes of spatial zones designated by extended referents encompassing [I] of the deictic centre in the following examples:

(16) (The speaker explains his town to another person.)
koko wa mazushii machi dakara na
KOko TOP poor town because SF
'It's a poor town here (literally this place 'town'), so…'
WORLD

(17) (The speaker explains his region to the other person.)
koko no fuyu wa nagai kara ne
KOko GEN winter TOP long because SF
'The winter is long here (literally the winter of this place 'region'), so…'
WORLD

(18) (The speaker talks about the world in which he lives.)
chansu o mitsukete **koko** o nigedashi futari de motono
chance ACC find-LINK KOko ACC escape two of us with original
sekai ni modoroo.
world LOC let's go back to
'Let's find a chance to escape here (literally this place 'world') and go back to our world together.'
WORLD

The three referents above expressed with the *–ko* suffix of *koko* gradually become bigger from (16) to (18). In (16), the extended referent of the *–ko* suffix is a 'town' where the speaker lives. The extended referent of the *–ko* suffix in (17) is a 'region' which the speaker belongs to. The last one in (18) is a 'world' in which the speaker exists, in contrast to another world. Let us represent all three different spatial zones in one diagram.

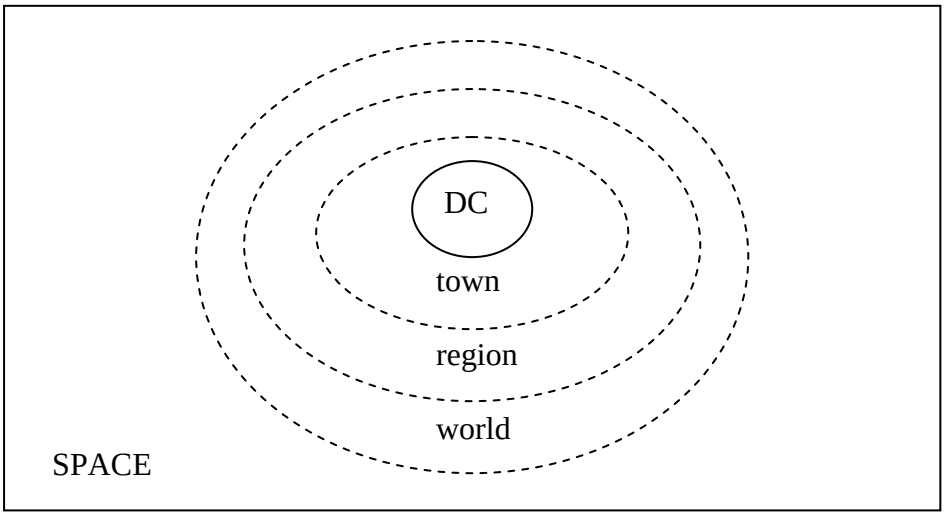


Figure (5.17): Three extended referents and three spatial zones

This illustration demonstrates a type of image schema called CENTRE-PERIPHERY schema, which coincides with the schematic patterns presented in 4.3.5. Considering that our body is a perceptual centre, it can be hypothesized that the central point of the CENTRE-PERIPHERY schema created by the speaker coincides with the deictic centre [I, here, now].

This relationship between the deictic centre and spatial demonstratives is also seen in other languages. For example, Brown and Yule (1983:51-2) describe English as follows:

> Suppose X is talking to Y, standing on the blue border of the carpet in X's office, in a given street, in Manchester, in England, in Britain, in Western Europe...Y might produce any of the following utterances: (a).There's another worn section which needs repair **here**. (b). You've got a very nice room **here**. (c). It's a really nasty day **here**. (d). You have a comparatively mild climate **here**.

We can see that *here* in English also behaves in the same way as *koko* in Japanese. Although this type of feature in the relationship between the deictic centre and spatial demonstratives may not be language-universal, we can state that it is not a unique property observed in Japanese demonstratives. The essence of this characteristic is that spatial referents radiating from the deictic centre are not restricted to the size of a real place but rather are conceptualizations in our construals.

Considering the schematic pattern extended from the deictic centre, the following remark in Levinson (1983:64) is insightful.

> It may help readers to visualize this unmarked deictic centre if they can imagine a four-dimensional space, composed of the three dimensions of space plus that of time, in which a speaker stands at the centre. Radiating out from the speaker are a number of concentric circles distinguishing different zones of spatial proximity.[35]

From a cognitive point of view, the above idea of Levinson can be restated to say that the property of the schematic pattern is how a speaker construes a spatial zone from the DC into the domain SPACE. Let us depict it as follows:

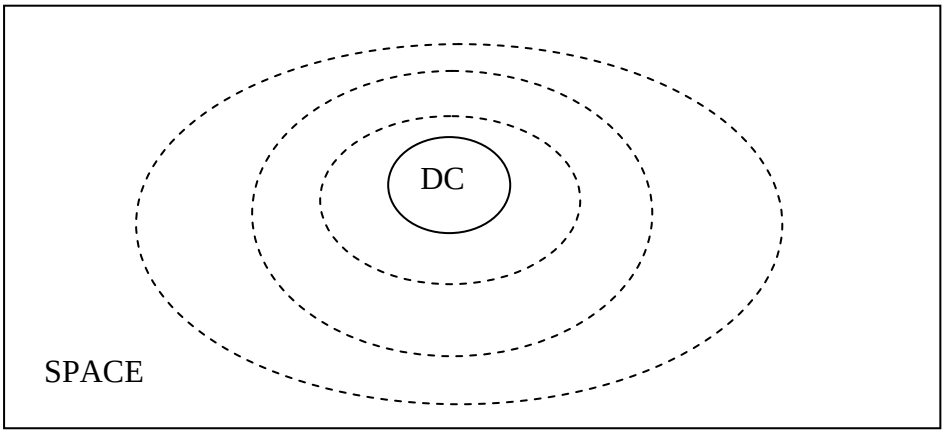


Figure (5.18): The extended spatial zones from the deictic centre

Figure (5.18) shows that the *–ko* suffix of *koko* can designate extended referents from the space where the speaker is standing to the entire universe, according to the speaker's construals.

As a concluding remark, no matter how extensive they are, infinite spatial referents of the *–ko* suffix can be realized in one specific schematic pattern, radiating from the deictic centre, as long as they are inclusive of the [I] of the DC. I will call this schematic characteristic of the *–ko* suffix, that is, **the extensional fields from the deictic centre, ''FIELD''**. Let us define the property FIELD as follows:

[35] This comment comes from his work *Pragmatics* and he did not use tools of cognitive linguistics explicitly. However, his idea is definitely close to that of the cognitive approach (Johnson 1987) as presented in 4.3.5.

The first schematic property of the *-ko* suffix of spatial demonstratives is the FIELD encompassing the deictic centre [I]; it is a realization of a fuzzy bounded entity in a schematic pattern of the radiated zones from the deictic centre [here] in the domain SPACE.

In previous studies, it has often been considered that this property belongs to the *KO*-series. However, this interpretation is incorrect, because, if the *KO*-series possesses this property, *kore* could also correspond to the deictic centre or encompass the deictic centre, but it cannot.

5.3.6 Extending referents of the *–ko* suffix outside the deictic centre

Concerning the first extensional property FIELD, all levels of referent include the reference point, which is the deictic centre in the domain SPACE. Next, let us keep the deictic centre as a reference point but shift extensions of *koko* to referential places, which do not intersect with the deictic centre. In other words, **another spatial referent, other than [here] of the deictic centre, is added in the SPACE domain**.

It should be recalled that whether a given spatial zone includes or is next to the notion of the deictic centre is a matter of the speaker's construal of the utterance-situation, and is not an inherent feature of the *KO*-series itself as explained in 5.2.3.

I will define the second referential property of the *–ko* suffix of *koko*. This can be demonstrated in the same way as the FIELD, that is employing cognitive concepts such as ''deictic centre'' and ''image schemas'' in the domain SPACE. Look at the following example.

(19) (Several people are conversing and the speaker mentions one particular person who is one of the hearers.)

Soo yuu hito ga genni **koko** ni iru kara tashikana mono da
so saying person NOM really KOko LOC exist because certain COMP COP
'It is certain, because there is such a person here.'
CAT

In (19), the *–ko* suffix of *koko* refers to the location of a person in front of the speaker. Let us describe the situation in which two distinctive entities (a bounded one with the solid-lined circle and a fuzzy bounded one with a solid-lined circle) occur in SPACE.

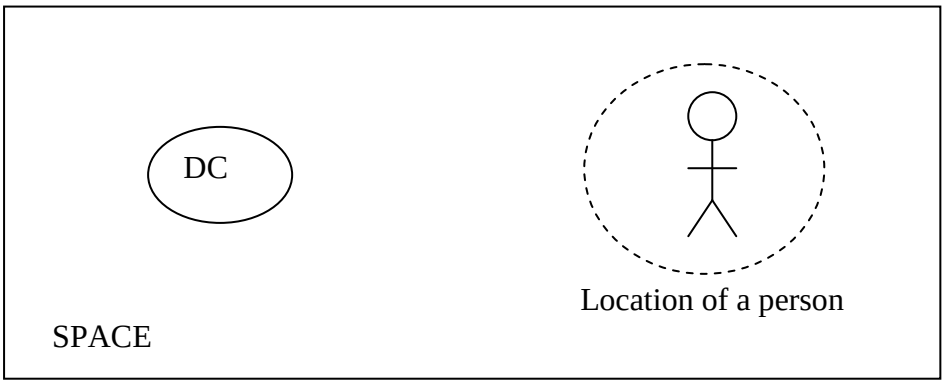


Figure (5.19): Location of a person

Figure (5.19) shows that there are two circles in SPACE, one of which is the deictic centre DC coinciding with the speaker; another is a space zone occupied by a person referred to in the discourse. The significant characteristic of example (19) is that, different from FIELD which must encompass [I] of the DC, the location of the referent in Figure (5.19) is **separated from the DC** and can be recognized as a contrasting spatial zone against [I] of the DC.

One of the easiest ways to distinguish other spatial referents from FIELD is whether deictic pointing is possible or not. The reason why the DC and the other spatial referent in Figure (5.19) are considered not to be within the same zone is because the speaker can point out that referent. In other words, if the referent is within FIELD, the speaker cannot specify it using a gesture. I will discuss other pragmatic features (pointing acts, influence of the addressee and various deictic contrasts) related to the extensional properties of the *–ko* suffix in the next chapter.

It is also permissible to refer to a location of a thing instead of a person's location with the *–ko* suffix.

(20) gakki nara **koko** ni ikutsuka arimasu.
instrument regarding KOko LOC several exist
'Here are several musical instruments'
WORLD

The –*ko* suffix of *koko* in (20) designates a location where musical instruments are laid out, facing the DC [I]. Let us draw the image.

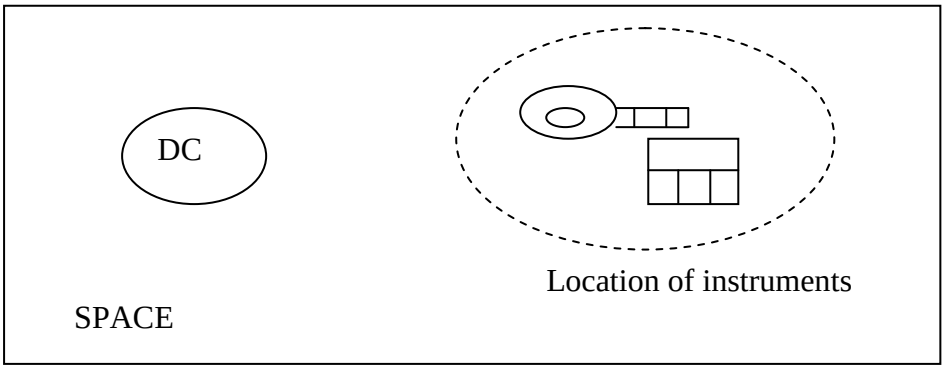


Figure (5.20): Location of instruments

We can see that the two entities in Figure (5.20) are in the same pattern as that in Figure (5.19), where the –*ko* suffix represents PLACE distinguished from the DC.

Next, let us consider a spatial referent that itself is unrelated to any physical referents. The following example reduces the scope of a location into a smaller point than the spatial locations seen in Figures (5.19) and (5.20). Observe the following example.

(21) (The speaker is watching the surface of the river and is ready to jump in.)

Koko da to omotte chikara o komete ittan tobiagatteoite
KOko COP COMP think-LINK power ACC put-LINK once jump-LINK
soshite koishika nanzono yooni miren naku ochiteshimaimashita.
then pebble something like regret without have fallen
'I thought 'here,' and jumped as hard as I could and then fell like a pebble with no regrets.'
CAT

In (21), the speaker uses the –*ko* suffix of *koko* to refer to a certain point on the surface of the river for jumping in. This case can be drawn as follows:

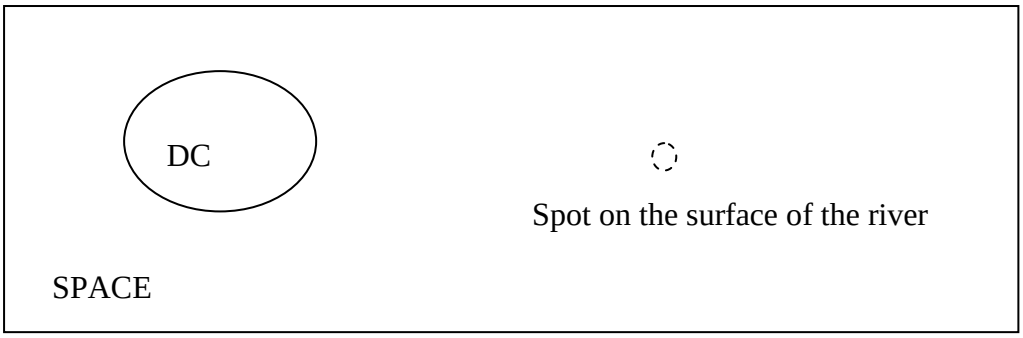


Figure (5.21): Spot on the surface of the river

Figure (5.21) represents that the referent of *koko* can simply be a point in space where the speaker will jump in and it is without any additional reference to a particular object. However, from the cognitive point of view, all examples in (19) to (21) demonstrate that extended referents are spatial zones different from the deictic centre, and they share the common conceptual property of being construed as fuzzy bounded entities outside the DC.

In the following, let us gradually expand spatial zones from a minimum point.

(22) (The speaker is pointing out the house in front of him.)

wagahai	wa	**koko**	no	kyooshi	no	ie	ni	iru	noda.
I	TOP	KOko	GEN	teacher	GEN	house	LOC	live	it is

'I live in this teacher's house.'

CAT

In (22), the *–ko* suffix of *koko* refers to an area encompassing the house. The diagram can be drawn as follows:

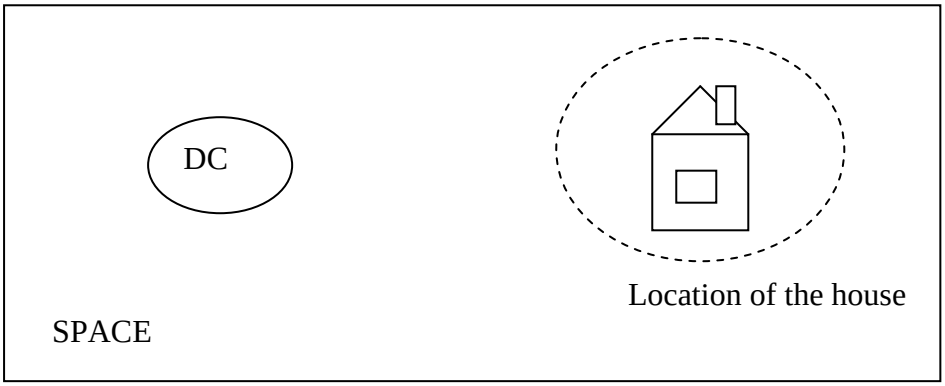


Figure (5.22): Location of the house

We confirm again that there are two referents: one is the DC and another is a place outside of the DC. In this perspective, it does not matter whether the *–ko* suffix of *koko* refers to (a) the location of a house, (b) in front of a house or (c) inside a house as seen in the following examples and Figure (5.23):

(a) **koko** ni ie o tateyoo.
KOko LOC house ACC let's build
'Let's build a house here.'

(b) **koko** ni tatte kudasai.
KOko LOC stand-LINK please
'Please stand here (in front of the house).'

(c) **koko** ni hairimashoo.
KOko LOC let's enter
'Let's go inside.'

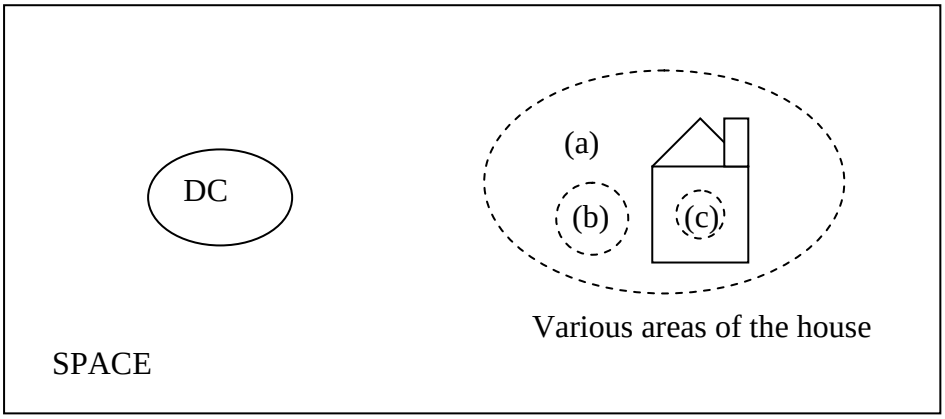


Figure (5.23): Various areas of the house

Every zone in Figure (5.23) belongs to only one conceptual property, which is a fuzzy bounded spatial zone separated from the DC in the domain SPACE.

Furthermore, we can maximize extended referents of the *–ko* suffix outside the DC as seen in the following examples taken from the Internet:[36]

[36]Example (23) is taken from the home page (HP) *Watashi no sukina Boofu no basho* 'the places I like in Boofu', URL: http://www.taka21.com/cgi-bin/fvote/fvote.cgi?detail=%91%e5%95%bd%8eR

(23) (The speaker is pointing out a certain area from the top of a mountain.)

Koko ga watashino machi da

KOko NOM my town COP

'This is my town'

In (23), the *–ko* suffix refers to the town where the speaker lives from the perspective of looking down at it from the top of a mountain. The next example illustrates that the *–ko* suffix can designate a larger referent than a town.[37]

(24) (The speaker is pointing out the earth from a space station.)

Koko ga chikyuu ka

KOko NOM earth SF

'This is the earth.'

In (24), the *-ko* suffix can refer to the earth. Let us schematize the above two examples.

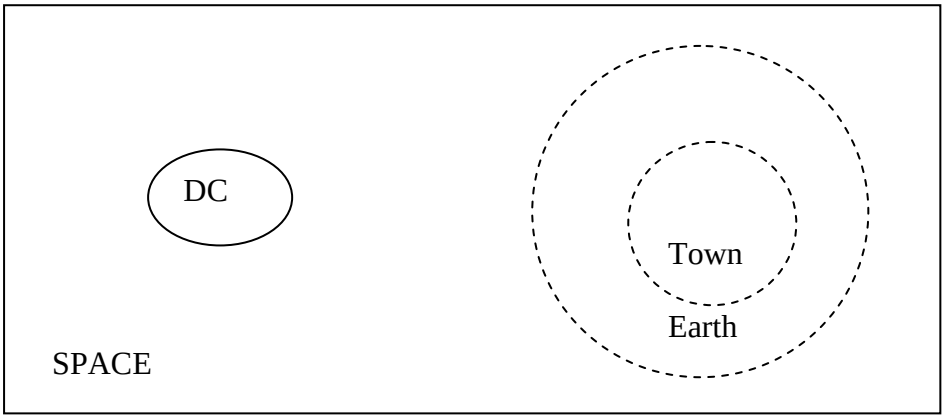


Figure (5.24): Two extended referents outside the deictic centre

These examples allow us to imagine an unlimited nested structure of spatial zones outside the DC. In this context, [here] in the DC itself never expands, in contrast to the FIELD in Figure (5.18). This schematic pattern in Figure (5.24) also coincides with the CENTER-PERIPHERY schema. Therefore, I will propose extended spatial zones outside the DC as another distinct conceptual property of the *–ko* suffix of *koko* and call **the extensional**

[37] Example (24) is taken from HP *Choo butooden 5 kooryaku* 'Strategy guide for the game *Choo butooden* 5', URL: http://f58.aaa.livedoor.jp/~nunudead/game/DB5/op/op.htm

location outside the deictic centre ‘‘LOCATION’’. Let us define the property LOCATION as follows:

> The second schematic property of the *-ko* suffix of spatial demonstratives is LOCATION excluding the deictic centre [I]; it is a realization of a fuzzy bounded entity in a schematic pattern of the radiated zones outside the deictic centre [here] in the domain SPACE.

Let us represent the schematic pattern of LOCATION as follows:

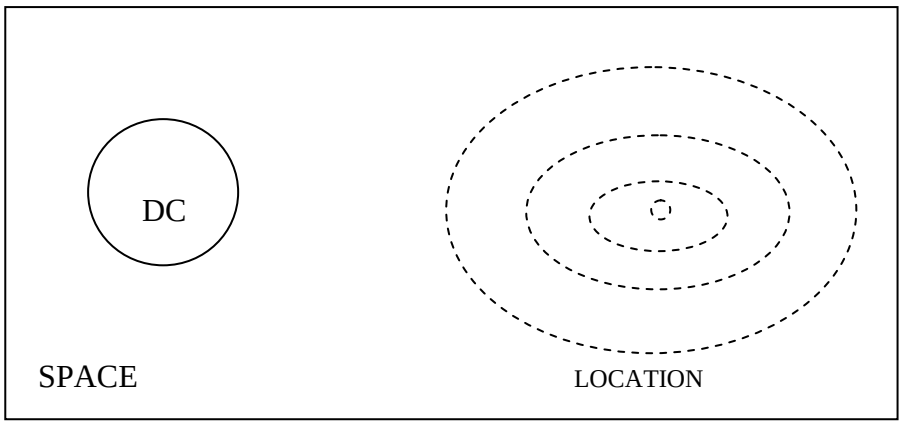


Figure (5.25): The schematic pattern of LOCATION

It is possible to call LOCATION ‘‘FIELD excluding the DC’’, but I will avoid terminological confusion and attempt to focus on a general function of *place*, which is to locate something in, on, by or at somewhere. In other words, LOCATION always demands different spatial points or zones separated from the DC.

5.3.7 The difference between FIELD and LOCATION

In order to clarify the discussions above, this section compares the two properties FIELD and LOCATION. Look at the following example, in which a speaker explains the world in which he lives. The speaker is a guard of a forest. He is asked about whether he is lonely, because his living place is isolated. He says, ‘‘no’’ and then explains the reason as follows:

(25) (A speaker is standing in front of his cottage.)

Mori wa **koko** ni arushi watashi wa **koko** ni sundeimasu.
woods TOP KOko LOC exist-LINK I TOP KOko LOC live
'The woods are here and I live here.'
WORLD

In (25), the speaker uses the spatial demonstrative *koko* twice, designating two different referents. However, the two expressions can represent one type of entity (fuzzy bounded entity) with two different schematic patterns representing the way the referents are construed. The first one refers to a forest and the second one refers to the living area including his standing point and his cottage. Let us look at the following pictures.

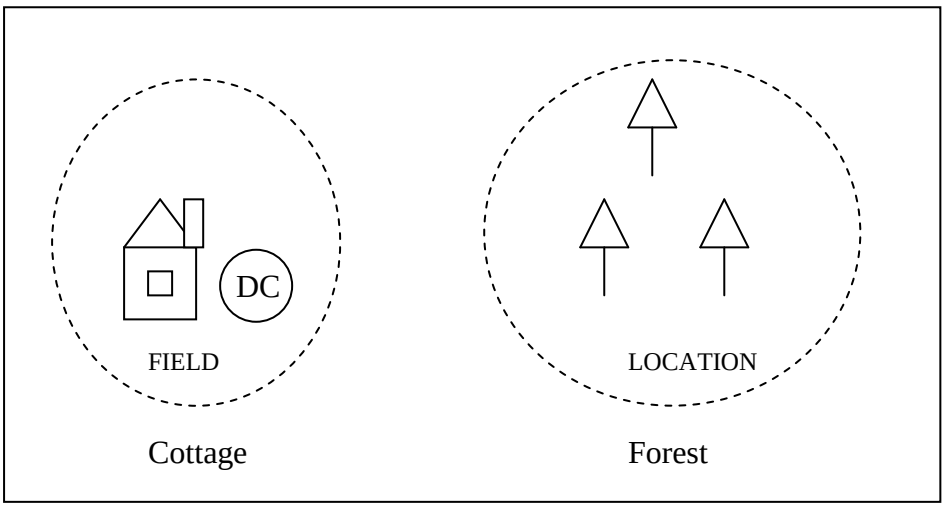


Figure (5.26): The difference between FIELD and LOCATION

Figure (5.26) shows that there are two different spatial zones. One includes the deictic centre [I], the spatial zone of which is the speaker's living area with his cottage and extensions of the deictic centre [here]. Another refers to the spatial zone outside the DC, which is the area of the forest.

Two pragmatic differences between them can be distinguished by (i) whether there is a deictic pointing gesture or not, and (ii) the possibility of substituting the *KO*-series with the *SO*- and *A*-series. In (25) and its representation in Figure (5.26), the forest can be pointed out with gestures, and *soko* and *asoko* could replace *koko,* but this is not the case for the cottage. These pragmatic functions will be discussed in the next chapter.

The crucial conceptual difference between FIELD and LOCATION is topological.[38] An essence of topology is that characteristics of elements are preserved in a set regardless of their configurations.[39] In the case of conceptual properties of FIELD, all spatial referents in the FIELD possess the same property of **encompassing the DC**, no matter how different the size of referents, for example, from the speaker's location, to the universe. In other words, the topological characteristic in FIELD is the potential for any size of spatially extended referents in FIELD to be convergent with [here] of the DC (as a minimal level). In contrast, any spatial referent realized in the property LOCATION **never intersects with the DC**. It is in this point that LOCATION is topologically different from FIELD.

Conceptual difference and functional difference should be carefully distinguished. Conceptual differences between FIELD and LOCATION are based on the topological features. They are schematic patterns of fuzzy bounded entities represented by the *–ko* suffix and various referents designated by the form of *koko*. However, functional differences are essential to the pragmatic features, realized by the deictic pointing and substitutions of *KOSOA* along with the schematic patterns of FIELD and LOCATION themselves.

In terms of ranks of semantic relationships, it can be said that FIELD is higher than LOCATION, because a speaker can extensionally construe LOCATION to be included within FIELD as follows:

[38] The term ''topology'' is a notion borrowed from mathematics, and it is used in various academic fields. In linguistics, the cognitive approach mainly employs it for explanations of the relationship between spatial cognitive faculties and the use of languages (Talmy 2000 ch.3) and of preserving schematic structures in metaphorically related expressions (Lakoff 1987, 1990).

[39] For example, a circle, a triangle and a rectangle display different shapes, but they can be drawn using one line. Therefore, they are topologically recognized to possess the same feature. On the other hand, a doughnut shape needs two lines to draw it, which means that a doughnut type of shape is topologically different from a circle, a triangle and a rectangle.

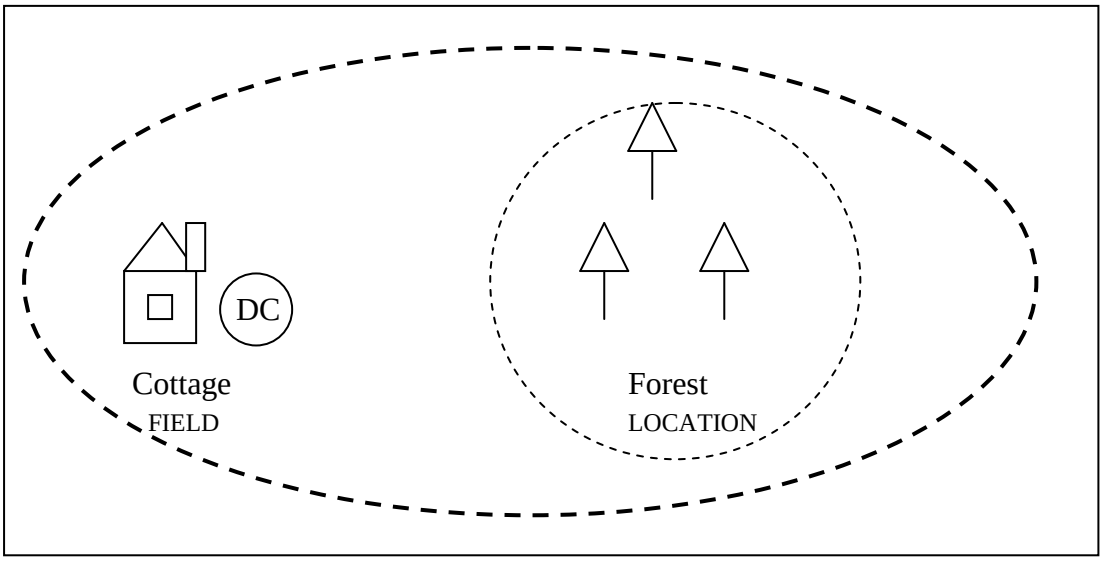


Figure (5.27): LOCATION merged into FIELD

In situation (25), if a speaker construes the entire space including the forest as his living area, he can say, for example, ***Koko*** *ga watashi no sekai da* 'This place is my world'. In that utterance, the world can encompass the DC as well as the former LOCATION. On the other hand, there is no reverse conceptualization where FIELD is merged into LOCATION, because LOCATION can never intersect with the DC.

This can also be evinced in terms of pragmatic functions, namely the possibility of using deictic pointing and combinations with other deictic roots, discussed in Chapter 6 in detail.

5.3.8 Extending referents of the *–ko* suffix inside a bounded entity

In this section, I will examine the third and last conceptual property of the *–ko* suffix of *koko*. First of all, let us reconfirm how to extract the conceptual property FIELD by way of the CENTRE-PERIPHERY schema. The following two diagrams show two schematizations of FIELD; Figure (5.12) sets up the DC [here] in the domain SPACE, and then Figure (5.28) shows expanding zones from the DC [I].

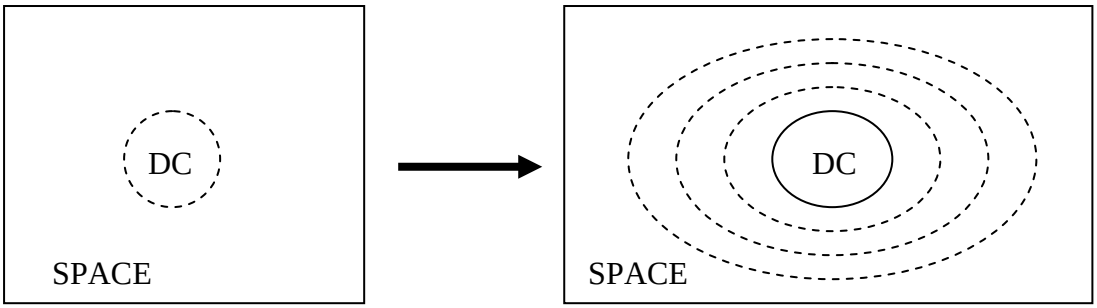


Figure (5.28): An expansion from [here] of the DC to FIELD

For schematizing FIELD, we postulate radiating spatial zones out of the deictic centre [I, here, now]. The scope of each spatial zone coincides with extensions of the *–ko* suffix. Moreover, the size of extended referents of *koko* is unlimited as in {DC < inside buildings < region < world}.

Firstly, let us observe a different type of referent from FIELD expressed by the *–ko* suffix in the following instance:

（26）(The speaker points out her forehead.)

Onna	wa	mage	ni	yuuto	**koko**	ga	tsuremasu	kara
woman	TOP	topknot	into	tie-LINK	KOko	NOM	twitch	because

'because women twirl this part when tying a topknot'

CAT

In this example, the *–ko* suffix of *koko* refers to a body part of the DC [I], namely the forehead. Here, the extended referent of *koko* does not expand out of the DC, but rather, it withdraws into the inner zone of the DC. Let us depict the image.

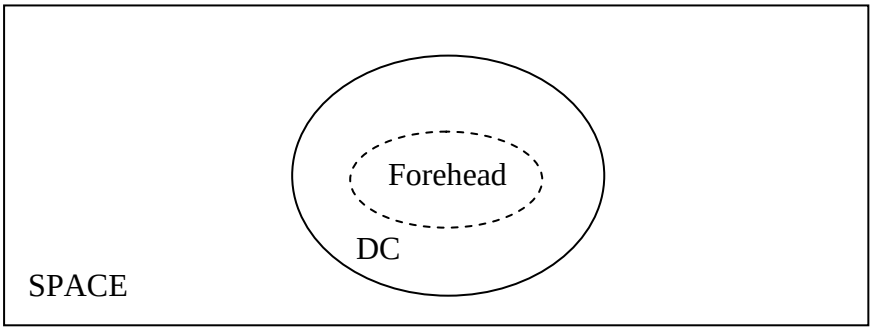


Figure (5.29): On the surface of the forehead

Figure (5.29) shows that the zone designated by the *–ko* suffix of *koko* exists within a bounded entity that is the DC [I], more precisely **on the surface** of the speaker's head. Compared with Figure (5.28) of FIELD, the figurative difference resides in whether the circle with broken lines is inside or outside the DC [I]. We cannot call this example FIELD any longer, because it is topologically different (referents inside or outside DC). Look at another instance.

(27) ''**koko** ni ne'' to watashi wa itte yubi no saki de
KOko LOC SF QUO I TOP say-LINK finger GEN point with
jibun no atama o tsutsuita.
self GEN head ACC poked
'I poked my head with my finger, saying 'here it is'.
WORLD

In (27), the *–ko* suffix of *koko* is employed for referring to **the inner part** of the head,[40] which we can interpret as a kind of a metonymical extension of the brain (I will discuss metonymical extensions in 7.2.5.2). Regardless of whether they are **a point on the surface** or **inside of the speaker's body**, these referents cannot expand out of the body itself. Let us describe the process of the schematization transferring from the DC [I] to the inner part of the DC.

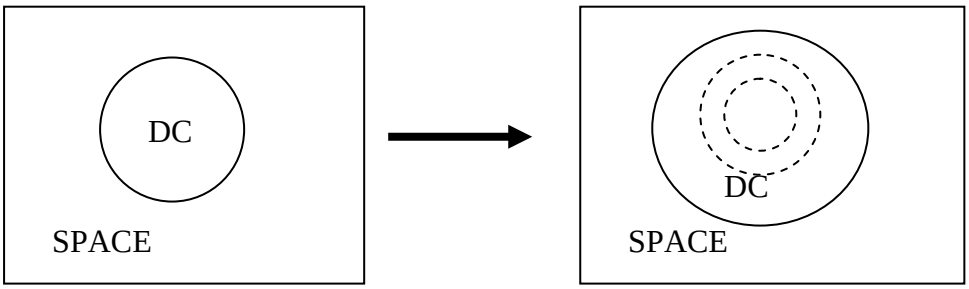


Figure (5.30): A schematization of extended referents inside the DC

[40] In this situation, the speaker is pointing to his head, but the real referent in this context can be interpreted as the brain keeping memories. However, as the spatial demonstrative *koko* is used, we can interpret it that the place (inside the head) is profiled rather than the brain itself. Its construal is motivated by metonymy between the brain and the container of the brain, which is generally called ''metonymical extension'' in the cognitive approach.

The most important feature of the image schema in Figure (5.30) is that the broken-lined circles are contained within one solid-lined circle. In other words, one bounded entity encompasses several fuzzy bounded entities.

Secondly, let us illustrate that the *–ko* suffix can represent fuzzy bounded entities inside a bounded entity separated from the deictic centre.

(28) Boku ga **koko** kara furui yume o yomitoru toyuu koto wa wakatta yo
I NOM KOko from old dream ACC read called COMP TOP understood SF
'I understand that I have to read old dreams from here.'
WORLD

Koko refers to inside an object, which is the skull of an animal, as a bounded entity. This may be depicted as follows:

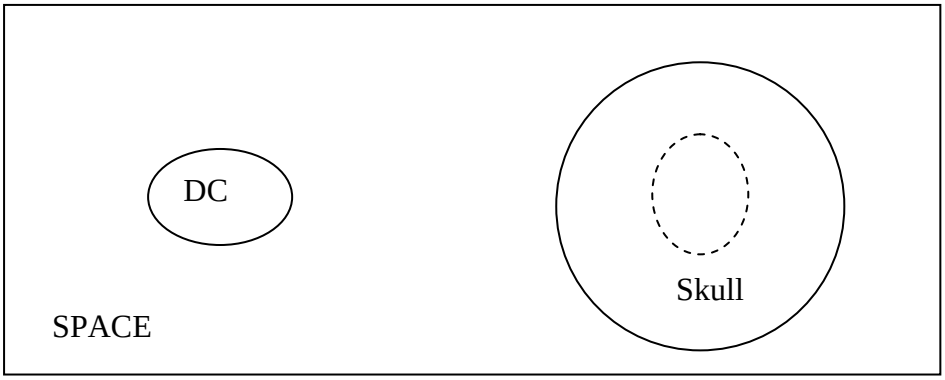


Figure (5.31): Inside the skull

In contrast to Figure (5.29), a fuzzy bounded entity in Figure (5.31) is designated inside a bounded entity **separated from the deictic centre**. Hypothetically, we can conceptualize infinite fuzzy bounded entities within one bounded entity. Let us observe two usages of the *–ko* suffix in the following example.

(29) (A speaker is demonstrating how functional his scissors are.)

‘‘Kochira no ha no saki wa kiri ni dekiteiru.

This way GEN cutting GEN edge TOP drill into made

Koko no tokoro wa kakizokonai no ji o kezuru basho de

KOko GEN place TOP mistake GEN letter ACC scrape place COP-LINK

barabarani hanasuto naifu ni naru. Ichiban shimai ni...

separately if detach knife into become very last at

saa okusan, kono ichiban shimai ga taihen omoshiroi ndesu.

well madam this very last NOM very interesting it is

Koko ni hae no medama kuraina ookisa no tama ga arimashoo,

KOko LOC fly GEN eye like size GEN ball NOM exist

chotto, nozoite goran nasai’’

a little look into-LINK try and see

‘The tip of the blade can be used as a drill. This part can erase writing errors and, when detached, becomes a knife. Finally, Madam, this last point is the most interesting. Here is a ball about the size of a fly’s eyes, please look at this.’

CAT

The first and second referents, denoted by *koko*, are parts of a pair of scissors: the point of a blade and an attached round object. Both can be recognized as being on the surface of an object. Let us depict them as follows:

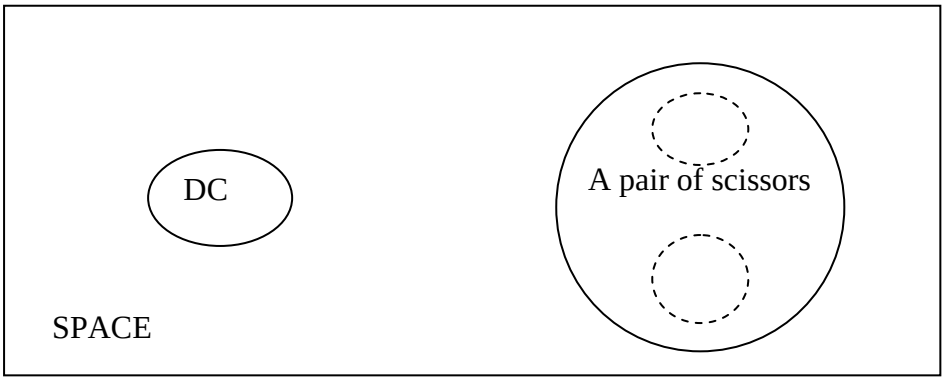


Figure (5.32): Parts of a pair of scissors

So far, I have explained a new schematic pattern in comparison with the extensional properties of FIELD and LOCATION. Before defining this third property of the *–ko* suffix of *koko*, I will clarify two significant differences of the third property from FIELD and LOCATION.

The first difference concerns the direction of expanding spatial zones of referents. FIELD and LOCATION are schematized in the outer direction of the bounded entities from the minimal referents, while the third schematic pattern of *koko* is in an inward direction within the bounded entity, and is reducible to a single point but never beyond a bounded entity.

The second difference is in regard to the types of entities represented by the *–ko* suffix. We have seen that the intensional property of the entity in FIELD and LOCATION is typically fuzzy bounded. However, the entity of the *–ko* suffix in the third schematic pattern always denotes **the ‘‘relational’’ in addition to the ‘‘fuzzy bounded’’**. As seen in 5.2.4, a relational entity inherently implies the existence of another entity such as an oblique side of a triangle (an oblique side cannot be construed individually).

For example, one single spot or space of LOCATION can be construed without any background referent as seen in Figures (5.21) and (5.24), whereas the *–ko* suffix in the third schematic pattern demands at least one larger background bounded entity as a base within which to profile a fuzzy bounded entity, e.g. the *forehead* seen in example (26) cannot exist without a *head*. Phrased differently, a fuzzy bounded entity inside a bounded entity requires a relationality between two entities.

Let us observe the difference of types of entities between FIELD/LOCATION and the third schematic pattern in the following representations: one is a fuzzy bounded entity **inside a fuzzy bounded entity** in Figure (5.33) and the other is a fuzzy bounded entity **inside a bounded entity** in Figure (5.34).

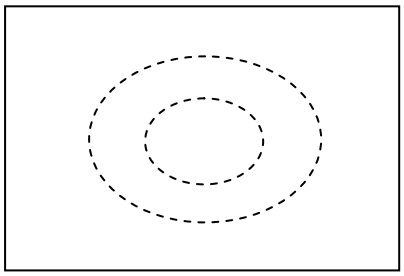


Figure (5.33): A fuzzy bounded inside a fuzzy bounded

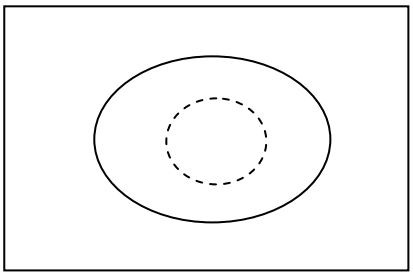


Figure (5.34): A fuzzy bounded inside a bounded

Section 5.2.5 defined a bounded entity as THING and a fuzzy bounded entity as PLACE. In terms of those definitions, we can restate Figure (5.33) as PLACE inside PLACE and Figure (5.34) as PLACE inside THING.

In the case of PLACE inside PLACE, a larger spatial referent is a fuzzy bounded entity, and this shows two significant characteristics. Firstly, the larger spatial entity is open to construal as the base for profiling the smaller spatial referent, so that the smaller spatial

referent can be construed individually without relying on other referents. Secondly, the larger spatial referent is substitutable with much larger referents, which can construct a nested structure of PLACE, depending on construals, e.g. this place in this street in this area in this town in this city in this country. However, in the case of PLACE inside THING, one spatial referent must be fixed and cannot be substituted by a larger size of referent in construals, and it becomes the base for the relationality with a fuzzy bounded entity.

Considering the conceptualization of fuzzy bounded and relational entities, we can categorize them as a subtype of PLACE, which is a special case in which fuzzy bounded entities are profiled inside a bounded entity.

Finally, I will call **the extensional parts inside a bounded entity ''PART''**.[41] The definition of PART is as follows:

> The third schematic property of the *–ko* suffix of spatial demonstratives is the PART inside or on the surface of a bounded entity; it is a realization of a fuzzy bounded and relational entity in a schematic pattern of the radiated zones inside any bounded entities in the domain SPACE.

Based on the above definition, we can answer several questions about semantic classifications in previous studies (presented in 3.3.1) where meanings of the *–ko* suffix in the following two examples are treated separately: one for ''place names'' and the other for ''parts of wholes''.

(30) (the speaker is pointing to a map.)
Koko ga daigaku de... [M]
KOko NOM university COP
'Here is the university, and…'

[41] Regarding the concept PART, there are several different ideas in the literature. For example, Wierzbicka (1996:60) points out three different usages: (i) things within larger things, (ii) a piece of something, (iii) a subset of a group of discrete entities. In terms of meronymy, see Croft and Cruse (2004) and Schalley (2004). The concept PART in this thesis focuses on whether a ''fuzzy bounded'' entity is inside a ''bounded'' entity or not, which creates the relationality of two entities.

(31) (Looking at a hearer's paper)

Koko no joshi no tsukaikata ga yokunai kara naoshimashoo.
KOko GEN particle GEN how to use NOM not good because let's correct
'Let's correct the use of this particle here, because it is not good.' [M]

The intensional properties of *koko* in (30) and (31) are fuzzy bounded and related to other entities. Their extensional properties have the same schematic pattern of the *–ko* suffix PART, which is realized inside a bounded entity. Thus, we can categorize the two meanings in (30) and (31) in the same way.

Furthermore, the different conceptual properties of the *–ko* suffix can effectively describe the relationship between a place name on the map and a perceived place. Consider the following example, where the speaker points to a place name on the map and says:[42]

(32) **Koko** ga **koko** desu.
KOko NOM KOko COP
'This place is here.'

This expression appears to be a tautology such as 'A is A'. However, the first *koko* designates the place name on the map, which is conceptualized as PART, while the second *koko* refers to the perceived place including the deictic centre, which is conceptualized as FIELD. We can signify it as follows:

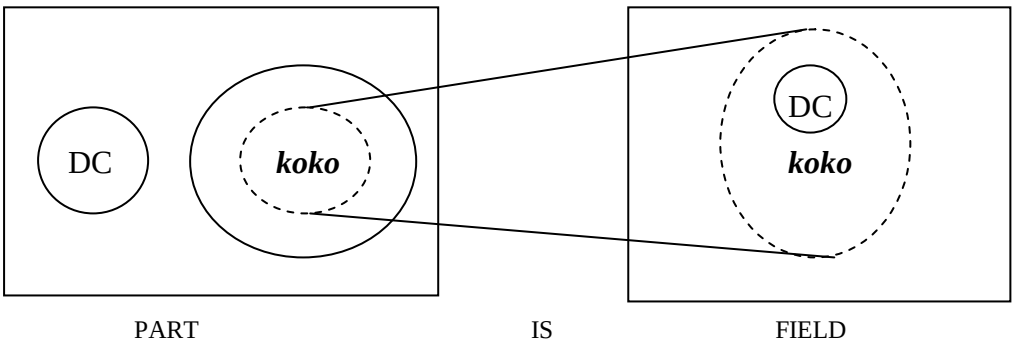


Figure (5.35): The identification of two different conceptualizations

[42] The example was used in the TV drama ''*Uerukame*'' on broadcast by NHK 4th of March 2010.

Koko ga koko desu ‘This place is here’ is a type of copula sentence expressing the identification of two nouns. Figure (5.35) indicates that the meaning of *koko ga koko desu* can be restated in a conceptual way as ‘the PART is the FIELD.’

Although PART seems to be neutral in its relationship with the deictic centre because of the occurrences of it inside and outside of the DC, it has unique behaviours when combined with *KOSOA* which I will discuss in 6.4.3 and 6.4.4.

5.3.9 Summary

In 5.3, I have investigated the kinds of extensional properties that the *–ko* suffix of Japanese demonstratives possesses in the relationship between entities and referents. The meanings of the *–ko* suffix have been assumed to be the semantically homogeneous feature [place] in previous studies. However, based on image schemas, the deictic centre [I, here, now], and types of entities, I have extracted three extensional properties; FIELD, LOCATION and PART, which show three topologically different conceptual properties.

In terms of descriptions using cognitive terminology, I can summarize the three extensional properties of the *–ko* suffix of spatial demonstratives as follows:

> The referential semantic structure of the *-ko* suffix of spatial demonstratives is realized as spatial conceptualizations in a mental reality, the process of which is (i) to set up the domain SPACE as a basic framework and the deictic centre [I, here, now] as a fundamental reference point and, (ii) to create three distinctive construals which profile (a) a fuzzy bounded entity radiating from the deictic centre (DC) against the base [I] defined as the FIELD, (b) a fuzzy bounded entity outside the DC against the base [I, here, now] defined as the LOCATION, or (c) a fuzzy bounded and relational entity against a base of a bounded entity, including the DC, defined as the PART.

5.4 Chapter conclusions

In this chapter, we have scrutinized the semantic structures of the *–ko* suffix from intensional and extensional point of views following the cognitive approach. First of all, we abstracted

intensions of the *–ko* suffix as categorizing a fuzzy bounded entity PLACE, based on the fact that the *–ko* suffix cannot represent any bounded entity conceptually (not perceptually).

Next, by means of combining the *–ko* suffix with the deictic part *KO-*, we established three extensional properties in the *–ko* suffix of spatial demonstratives based on the deictic centre as a vantage point. These consist of three schematic patterns of extended referents: FIELD, LOCATION and PART. It should be noted that these properties reside in the *–ko* suffix and not in the *KO-* root, because *kore* with the *–re* suffix cannot represent the deictic centre at all in the form *kore* and only *koko* can connect with the DC.

Let us structure the semantic layers of the *–ko* suffix in three levels as follows:

I One intensional property (not representing bounded entities)
II Three types of extensional properties (FIELD, LOCATION or PART)
III Various types of referents

In previous literature, researchers have concentrated on the third level, i.e. how to classify types of referents such as 'place', 'area', 'container', 'scene', 'part' and 'time' related to the deictic part *KOSOA*. However, this thesis clarifies concepts of the *–ko* suffix in levels I and II.

Next, let us depict the semantic relations of the *–ko* suffix with the semiotic triangle as follows:

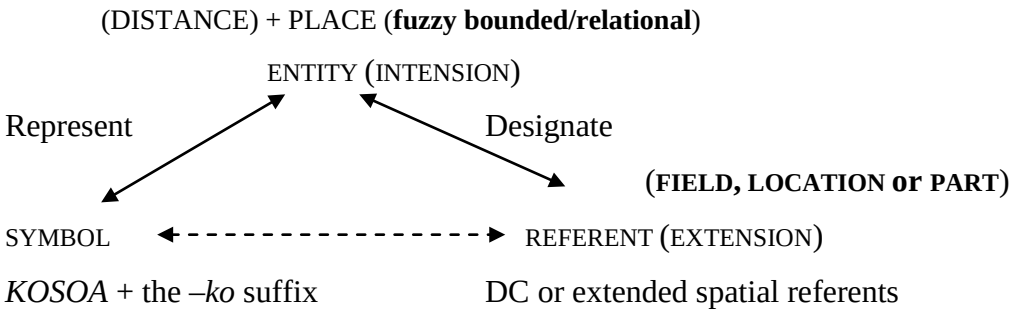


Figure (5.36): The semiotic triangle of spatial demonstratives

This represents the entire relationship among the *–ko* suffix, fuzzy bounded entities and spatial referents in nominal expressions. In this figure, I put DISTANCE for the conceptual property of *KOSOA* in brackets, because this treatment is temporary and I will discuss it in the next chapter.

The *–ko* suffix represents only a conceptual entity PLACE and cannot designate any referents by itself because it is a bound morpheme. Constructed with the deictic part *KOSOA*, the *–ko* suffix can be connected to spatial referents, which possess the intensional property fuzzy bounded/relational and DISTANCE. Although referents of the *–ko* suffix are contextually infinite, three extensional properties of FIELD, LOCATION or PART classify referential tokens into a limited number of the schematic patterns which can be regarded as referential types. Let us compare the meaning of the *–ko* suffix with the *–re* suffix in terms of types of entities as in the following tree:

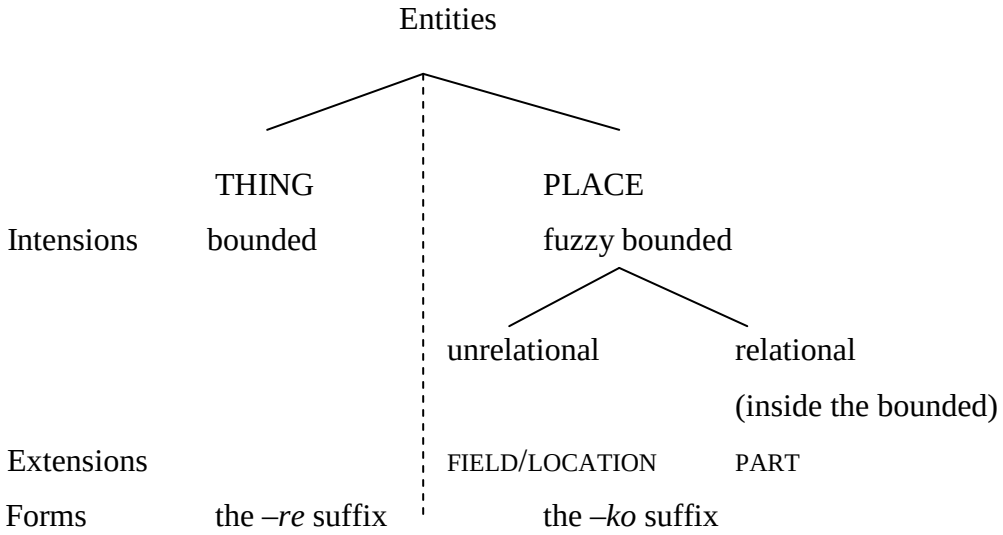


Figure (5.37): The relationship between meanings of the *–ko* suffix and the *–re* suffix

In terms of categorization and conceptualization, the *–ko* suffix can categorize an entity as a fuzzy bounded PLACE and conceptualize a referent as either FIELD, LOCATION or PART by means of a schematic pattern. On the other hand, the *–re* suffix categorizes an entity as a bounded THING. Although the systematic analysis of extensional properties of the *–re* suffix is beyond the scope of this thesis, I will show conceptual contrasts between the *–re* suffix and the *–ko* suffix in terms of construal alternatives with FIELD, LOCATION and PART in 7.2.

Concerning the polysemic nature of the *–ko* suffix, we can observe several semantic contrasts on different levels. Let us create three different divisions for the *–ko* suffix. Firstly, the demarcation between FIELD/LOCATION versus PART exists in the types of entities represented, in which PART must be relational as well as a fuzzy bounded entity. Secondly, between FIELD versus LOCATION, it matters whether spatial zones expand from the DC [I] or outside the DC. Thirdly, between FIELD versus LOCATION/PART, it is crucial whether there are

multiple spatial zones at one time or not, where FIELD allows only one zone at a time but LOCATION/PART accept multiple zones at the same time as in Figures (5.23) and (5.32). Let us summarize them as in the following table:

Table (5.3): Intensional and extensional distinctions

	Entities	Deictic centre	Numbers of zones
FIELD	fuzzy bounded	inclusive	one
LOCATION	fuzzy bounded	exclusive	more than one
PART	relational fuzzy bounded	in/exclusive	more than one

In the following chapter, I will pursue the pragmatic applications of semantic structures of the *–ko* suffix in terms of the relationship between deictic contrasts created by *KOSOA* and extensional properties of the *–ko* suffix and temporal expressions with the *–ko* suffix.

Chapter 6 Cognitive and pragmatic relationships between *KOSOA* and the *–ko* suffix in the EXOPHORIC use[1]

6.1 Introduction

Chapter 5 explored the types of entities that the *–ko* suffix can represent and how the *–ko* suffix can designate referents in conceptual ways. From the cognitive approach, I demonstrated that the entities represented by the *–ko* suffix cannot be 'bounded'. Rather, the *–ko* suffix is used to categorize fuzzy bounded entities such as PLACE. Moreover, the *-ko* suffix has three extensional properties, FIELD, LOCATION and PART, which are topologically distinct from each other and can classify schematic patterns of designating spatial referents with relation to the deictic centre and types of entities. We now move onto examining how intensional and extensional properties of the *–ko* suffix are interpreted in a deictic context, expressed by the spatial demonstratives.

Frawley (1992:275) remarks that deixis lies on the semantics/pragmatics border and, in spite of having pragmatic force and a contextual denotation, deixis also has a traditional semantic structure in that it brings its effects with it into any context. As seen in his work, one of the important points for studying spatial demonstratives is the semantics/pragmatics dichotomy. Looking at Japanese spatial demonstratives, we can recognize three semantic and pragmatic values relevant to their description, which are (i) extensional properties (FIELD, LOCATION and PART) of the *–ko* suffix, (ii) deictic contrasts of *KOSOA*, and (iii) the deictic centre as a prototypical reference point. It is not until each of the three components are fitted into a certain context that their referents are determined in the EXOPHORIC use. Therefore, the ultimate goal of this chapter is to clarify the interrelation of the three semantic and pragmatic values from which meanings of spatial demonstratives are composed.

Below I will elaborate on the following notions, which will be crucial in the discussion: (i) deictic contrasts, (ii) deictic pointing, (iii) construals of the hearer in SPACE, (iv) combinations of *KOSOA* and the *–ko* suffix, and (v) the semiotic triangles of spatial demonstratives.

[1] As explained in 2.3.2, using capital letters ''EXOPHORIC'' indicates a deictic contrast including the recognitional use, which overlaps with the EXOPHORIC use in terms of deictic contrast with language-external information (deictic pointing gestures and activations of old knowledge), not with language-internal information such as the anaphoric use and the discourse deictic use (the ENDOPHORIC use).

6.1.1 Deictic contrasts

Deictic contrasts are the semantic contrasts among deictic expressions such as [±proximity] to discourse participants, [±visibility] of referents and [up] or [down] for the elevation of referents' position, and [speaker] or [hearer] for the person's territory, introduced in 2.2.2.1.

In the previous discussion, I have selected DISTANCE as the prototypical deictic contrast of *KOSOA*, where the *KO*-series is construed as PROXIMAL, the *SO*-series as neither PROXIMAL nor DISTAL and the *A*-series as DISTAL following definitions in Hoji et al. (2003), as presented in 3.2.1.2. This thesis, however, does not aim to determine what the prototypical meanings of *KOSOA* are, but rather, it aims to describe **what kind of deictic contrasts can occur among *KOSOA* and what the motivation for a construal with each deictic contrast is**, when combined with each extensional property of the *–ko* suffix.

In the following sections, in addition to DISTANCE contrast, what I define as ''PERSON contrast'' and ''DEFINITENESS contrast'', both of which are facets of deictic contrast, will be systematically discussed. An explanation of these deictic contrasts will be detailed in 6.3.1.2 for DEFINITENESS and 6.3.2.1 for PERSON. I will also consider two other crucial cognitive and pragmatic dichotomies[2] associated with *KOSOA*: one is ''deictic pointing'' and the other is ''how to construe the hearer in a given situation''.

6.1.2 Deictic pointing

The meaning of demonstratives originates from 'pointing', about which Diessel (2006:470) writes as follows:

> In the exophoric use, demonstratives serve the same function as a deictic pointing gesture: Both a demonstrative and a deictic pointing gesture indicate LOCATION of an object relative to the deictic centre, i.e., they provide spatial orientation, and both function to focus the addressee's attention on a particular referent, i.e., they manipulate the interlocutors' joint attentional focus.

[2] The term ''cognitive'' focuses on the mental aspect of a speaker with or without profiling hearers and the term ''pragmatic'' focuses on the environmental aspect of a given situation with or without deictic pointing.

According to Langacker (1991:102-3), the pointing function of a physical or abstract gesture is considered **an aspect of the demonstrative's form**, which can determine the intended unique referent among multiple instances in the current discourse space. Therefore, I will examine how the deictic pointing interacts with the relationship between *KOSOA* and the *–ko* suffix.

As we shall examine in 6.2.2, there are cases in which deictic pointing cannot or need not occur with the use of a spatial demonstrative. I will also consider the relationships between deictic pointing and each of the three deictic contrasts in 6.3.3, where using deictic pointing can motivate how the speaker construes the hearer in a given situation.

6.1.3 Construals of the hearer in SPACE

In light of the hearer's presence, a speaker has one main construal distinction in a discourse situation: whether the speaker includes the hearer in the deictic centre or not. I will explain below how the notions of ''Hearer inside/outside the deictic centre (DC)'' is used in my model in comparison to models which have been previously proposed. Let us recall Sakuma's (1951:35) proposal in Figure (3.2), repeated from 3.2.1.1 (*KO, SO* and *A* stands for the *KO-*, *SO-*and *A-* series respectively. S and H represent the speaker and the hearer):

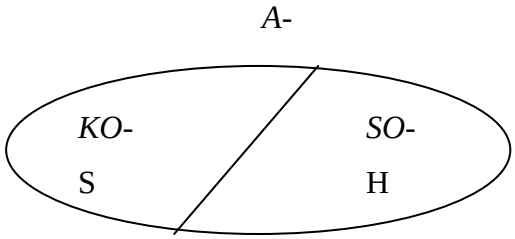
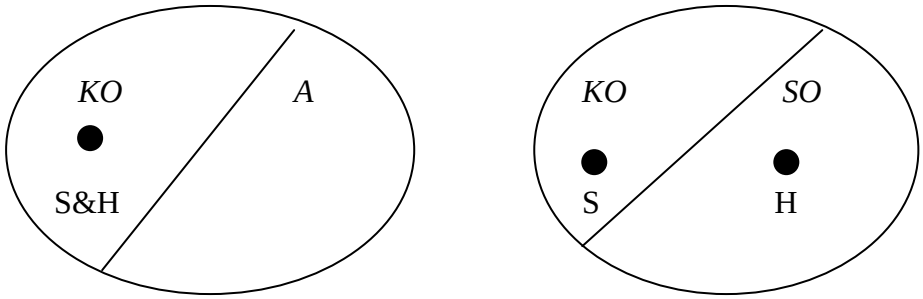


Figure (3.2): Territories of *KOSOA* in Sakuma (1951)

This is a basic situation encountered between a speaker and a hearer, in which a speaker uses the *SO*-series for the territory of a hearer. Contrary to Sakuma's single schematic perspectives of *KOSOA*, Mikami (1992) suggested two types of speech situation: one is the non-encountered type, in which there is no hearer's territory separate from that of the speaker within which to designate referents. The other is the encountered type, in which the hearer's territory is separate from that of the speaker, and is expressed by the *SO*-series to designate

referents. The non-encountered and the encountered situations between a speaker and a hearer suggested by Mikami (1992) are represented as follows (black dots indicate positions of discourse participants):



(I) the non-encountered (II) the encountered

Figure (6.1): Mikami's model (1992)

The non-encountered type is represented in (I) of Figure (6.1), where the speaker and hearer belong to the same territory of what is referred to by the *KO*-series as opposed to the *A*-series. The encountered type in (II) of Figure (6.1) has two zones, which are separated by the slanted- line and distinguish a speaker's and a hearer's territory when referring to something.

One of the important proposals of Mikami is that the *SO*-series does not occur in the non-encountered situation in (I) of Figure (6.1); that is, unless a speaker recognizes a hearer's territory, the *SO*-series is not available for a referential act. However, as observed in 3.2.1.2, the *SO*-series can be used as the so-called ''middle distance'' as in the following instance (taken from Shooho 1981), which is a counter-example to Mikami's model.

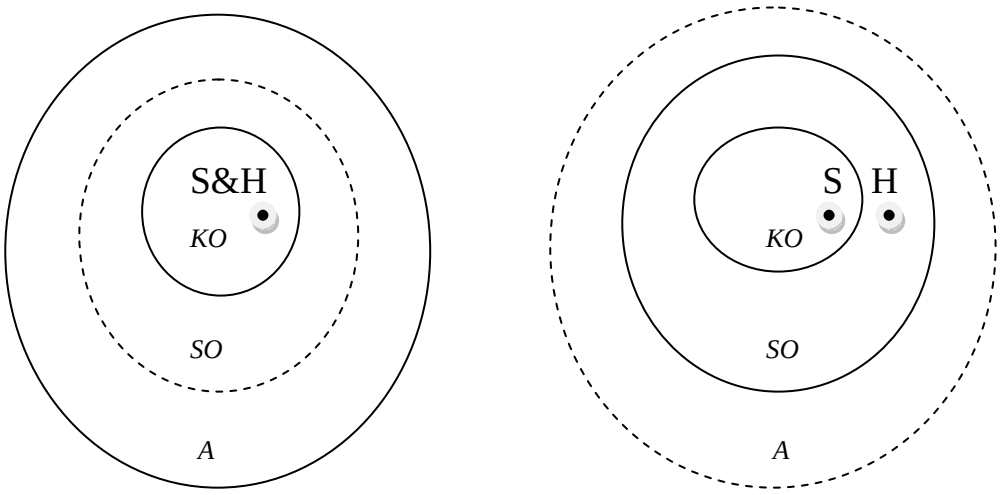
(1) (A speaker and a hearer in the same taxi.) [S]

Chotto **soko** de tomete kudasai.

Excuse me SOko LOC stop-LINK please

'Excuse me. Stop over there, please.'

In (1), the *SO*-series of *soko* is perfectly acceptable without referring to the place of the hearer as a distinct territory from the speaker. To account for this kind of atypical use of the *SO*-series, Shooho (1981) postulates the following modification to Mikami's model.



(I) the non-encountered (II) the encountered

Figure (6.2): Shooho's model (1981) of ranges of *KOSOA*

Shooho accepts Mikami's two situations as typical, which are the *KO*- and *A*-series in the non-encountered as in (I) and the *KO*- and *SO*-series in the encountered in (II). However, compared with Mikami's model in Figure (6.1), Shooho's model in (6.2) incorporates all three of *KOSOA* series in both the non-encountered and the encountered discourse situations, where the circle with broken-lines stands for atypical uses of the *SO*-series in (I) and the *A*-series in (II) respectively.[3] In recent studies of demonstratives, this model has become standard for describing the pragmatic distributions of *KOSOA* use. In this thesis, I basically accept Shooho's model and will call the non-encountered situation ''**Hearer inside the DC** (deictic centre)'' and the encountered situation ''**Hearer outside the DC**''.[4]

Furthermore, I will rephrase ''recognizing a hearer's territory in discourse'', labelled here ''**Hearer profiled**'', in terms of a motivation of a construal with a deictic contrast, which represents the fact that ''Hearer'' has more cognitive salience than other entities in a domain. ''Hearer profiled'' is also related to a choice of the deictic part *KOSOA* and will be discussed in 6.2.3 and 6.3.2.

In the following sections, I will focus on two types of speaker construals: (i) ''Hearer inside the DC'', in which a speaker can make a deictic contrast psychologically separate from

[3] Concerning atypical use of the *A*-series in Hearer outside the DC, see the example in footnote 12.
[4] It should be noted that the physical distance between the speaker and the hearer is not a decisive factor of selecting whether the hearer is inside or outside the DC; this is conceptually motivated by the speaker's construal.

profiling a hearer, and (ii) ‘‘Hearer outside the DC’’, which can motivate a speaker to profile a hearer (but not obligatorily) for a deictic contrast.

6.1.4 *KOSOA* and the *–ko* suffix in the EXOPHORIC use

As explained in the preceding chapters, previous studies have examined the meanings of the *–ko* suffix from the pragmatic perspectives of *KOSOA*, where the *–ko* suffix is considered to be [near place] for the *KO*-series versus [far place] with the *A*-series, or [speaker’s place] for the *KO*-series versus [hearer’s place] for the *SO*-series. Therefore, in order to illustrate that meanings of the *–ko* suffix should be defined without the notion of DISTANCE, which is derived from *KOSOA*, the deictic part has been confined to the *KO*-series in the previous discussions.

In this chapter, I will extend the analysis of spatial demonstratives to all of the deictic parts of *KOSOA*. Unlike in Chapter 5, I will conduct analysis of the EXOPHORIC use (the exophoric and recognitional uses).

6.1.5 The semiotic triangle of spatial demonstratives

Following the last chapter, I will employ Ogden and Richards’ semiotic triangle to understand the relationship between *KOSOA* and the *–ko* suffix. Firstly, let us recall some important points using several figures from Chapter 5. The original representation of Ogden and Richards’ semiotic triangle is as follows (I will use the same numbering of Figures as in Chapter 5.):

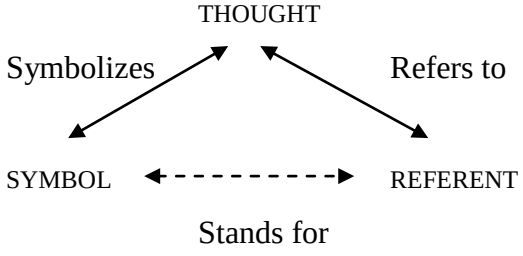


Figure (5.1): Ogden and Richards’ semiotic triangle

Chapter 5 considered the intensions of the *–ko* suffix at first, where I put the *–ko* suffix as a morpheme and intensions of the *–ko* suffix at the corners of SYMBOL and ENTITY respectively. These are highlighted in Figure (5.7) as follows:

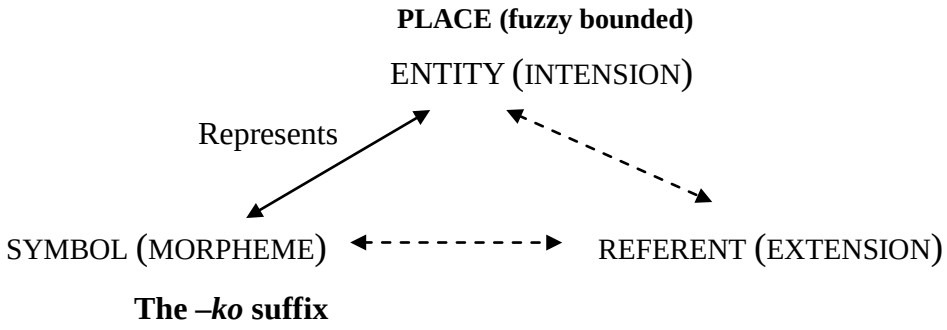


Figure (5.7): The semiotic triangle of the *–ko* suffix

Next, one of the deictic parts of *KOSOA* is combined with the *–ko* suffix to designate a referential token, because the *–ko* suffix alone cannot refer to anything and the combination of DISTANCE of *KOSOA* with PLACE of the *–ko* suffix (which is a spatial demonstrative in Japanese) enables language users to refer to a particular token and identify a referent. This can be depicted as follows:

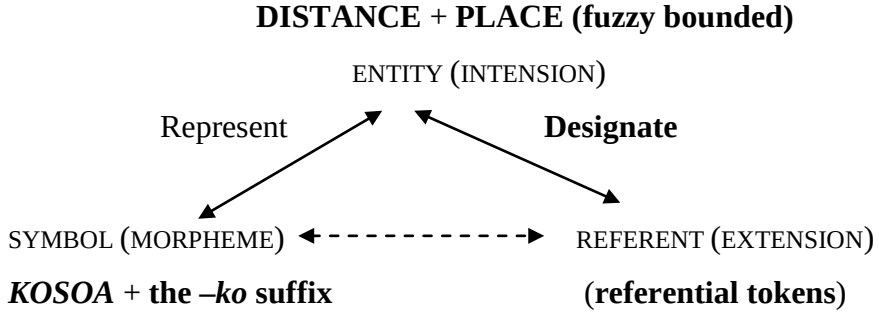


Figure (5.8): The semiotic triangle of spatial demonstratives

Compared to Figure (5.7), the deictic root of Japanese demonstratives *KOSOA* and its deictic contrast DISTANCE are added to the corners of SYMBOL and ENTITY in Figure (5.8). Thereby, SYMBOL can be linked with REFERENT through ENTITY, which is depicted as the solid-lined arrow from ENTITY to REFERENT.

Finally, referential schematic patterns (FIELD, LOCATION, and PART) created by the *–ko* suffix are added and the semantic relations of the *–ko* suffix with the semiotic triangle is completed as follows:

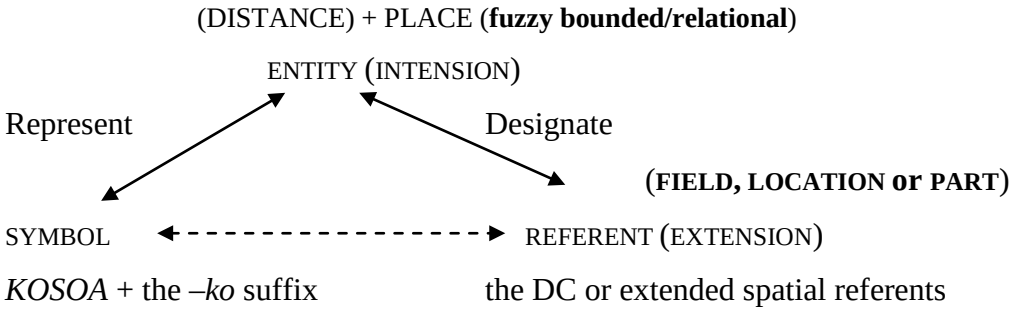


Figure (5.36): The semiotic triangle of spatial demonstratives

Figure (5.36) signifies the entire relationship among the *–ko* suffix, intension (concept) and extension (referent) in nominal expressions. Although referents of the *–ko* suffix can be contextually infinite (tokens), the three extensional properties of FIELD, LOCATION and PART proposed in this study can help classify them into a limited number of schematic patterns (referential types) so that different interpretations of the target uses can be systematically explained from a conceptual point of view.

In this chapter, I will discuss the relationships between referential schematic patterns of the *–ko* suffix and the deictic part *KOSOA* from three cognitive and pragmatic perspectives, represented in the following diagram:

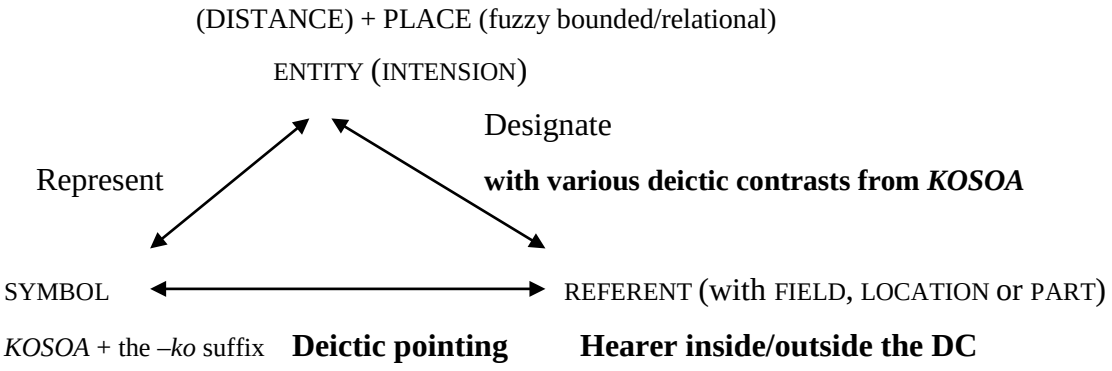


Figure (6.3): The semiotic triangle of spatial demonstratives from three cognitive and pragmatic perspectives

In the above diagram, I highlight three new points of interest: (i) what type of deictic contrast is designated with extensional properties of the *–ko* suffix (i.e. with each of the different *KOSOA* series), (ii) whether deictic pointing is necessary to designate referents or not, and (iii) whether the hearer is profiled in contexts or not, the situation of which is ‘‘Hearer outside the DC’’ or ‘‘Hearer inside the DC.’’

In Figure (6.3), the deictic contrast of *KOSOA* is presupposed as DISTANCE, given in brackets, which can be regarded as one potential motivating factor of various deictic contrasts. I will explicate the types of deictic contrasts by discussing the combination of *KOSOA* and the extensional properties of the *–ko* suffix. Furthermore, as Ogden and Richards (1923:12) indicate, we can set up ‘‘deictic pointing’’ as a direct link between SYMBOL and REFERENT, which also creates differences among extensional properties of the *–ko* suffix. The situation of ‘‘Hearer outside the DC’’ is a necessary condition for ‘‘Hearer profiled’’, which I will discuss in 6.2.3.

To sum up, the inquiry into expressions of the Japanese spatial demonstratives *koko, soko* and *asoko* consists of a reconsideration of forms which are a combination between *KOSOA* and the *–ko* suffix as compound construals consisting of **various deictic contrasts** of *KOSOA* and the **three extensional concepts** of the *–ko* suffix (FIELD, LOCATION and PART) in **two cognitive and pragmatic conditions**, which are **Hearer inside the DC or Hearer outside the DC in the speaker’s construal**, paralleled with **deictic pointing to referents**.

6.2 FIELD and *KOSOA*

This section will show how *KOSOA* interact with the first conceptual property FIELD. FIELD is a set of fuzzy bounded zones in the domain SPACE, and it must include the deictic centre [I]. Let us reconfirm the image schema for FIELD again.

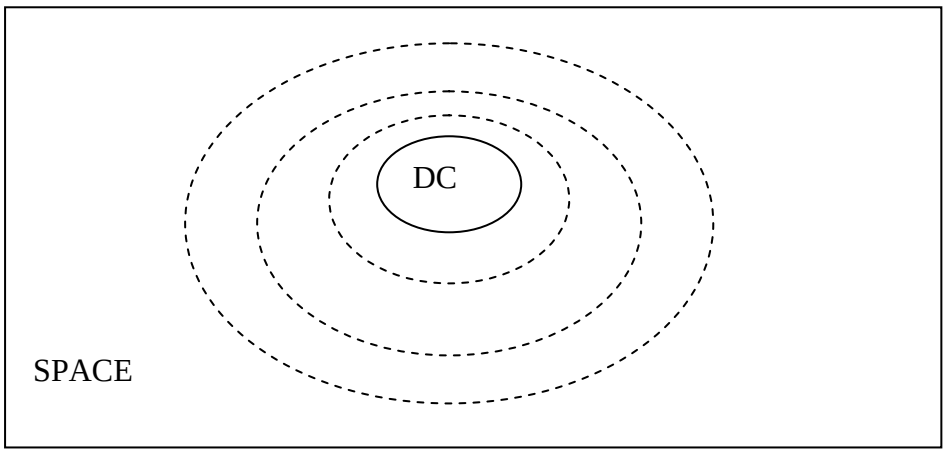


Figure (6.4): FIELD of the *–ko* suffix

FIELD can be of any physical size ranging from a speaker's standing point to the entire universe.

6.2.1 DISTANCE and FIELD

First of all, I illustrate the fact that DISTANCE as a prototypical deictic contrast does not occur within FIELD. Conceptualization of FIELD can only be denoted by the form of *koko* as the following examples (cf. examples (14), (16), (17) and (18) in Chapter 5) show.

(2) (There are two people talking in a room.)
Ima tochuude gochisoo o atsuraete kimashita kara soitsu o hitotsu
now on the way dinner ACC order-LINK came because it ACC one
{**koko/*soko/*asoko**} de itadakimasu yo.
KOko SOko ASOko LOC eat SF
'Since I have prepared dinner, I'll have it here.'
CAT

(3) (The speaker explains his town to other person.)
{koko/*soko/*asoko} wa mazushii machi dakara na
KOko SOko ASOko TOP poor town because SF
'It's a poor town here (literally this place 'town'), so…'
WORLD

(4) (The speaker explains his region to the other person.)

{**koko/*soko/*asoko**} no fuyu wa nagai kara ne

KOko SOko ASOko GEN winter TOP long because SF

'The winter is long here (literally the winter of this place 'region'), so…'

WORLD

(5) (The speaker talks about the world in which he lives.)

chansu o mitsukete {**koko/*soko/*asoko**} o nigedashi futari de

chance ACC find-LINK KOko SOko ASOko ACC escape two of us with

motono sekai ni modoroo.

original world LOC let's go back to

'Let's find a chance to escape here (literally this place 'world') and go back to our world together.'

WORLD

None of the above examples allow the use of the *SO*- and *A*-series, with only the *KO*-series possible in these contexts. Regardless of the sizes of the extended referents, the *–ko* suffix in FIELD is tied with only the *KO*-series. That is, the deictic contrast created by *KOSOA* is **absent inside FIELD**. As mentioned in 2.2.2, DISTANCE of demonstratives is a typical deictic contrast in many languages. However, even DISTANCE cannot be observed in FIELD. A type of deictic contrast that is present in FIELD will be discussed **in contrast with LOCATION** in 6.3.3. I will consider below the relationship between DISTANCE and FIELD.

In cross-linguistic studies, data on the ''no distance-contrast'' in demonstratives has been collected, summarized by Diessel (1999:38-9) as ''distance is thus after all a feature that occurs in the demonstrative system of all languages even though individual elements of the system may lack a distance feature''. That is, there is some variation of the deictic contrasts relevant with absence of DISTANCE from some demonstrative systems.

For example, Carlson (1994:160) reports that the Supyire language[5] has only one series of demonstratives which is used both for proximal and distal meanings. Anderson and Keenan (1985:280) explain that Czech *ten* may be exploited for items which are either close to or far from the speaker so that it is non-committal as to relative distance from the speaker. Colloquial German *dies* and stressed *das* and French *ce* and *cette* are also regarded as

[5] Supyire is spoken in the region of southeastern Mali in Africa.

distance-neutral demonstratives. They share the same type of strategy to mark deictic contrast, where spatial demonstratives are employed together, e.g. *das Haus da* 'this/the house there' and *cette maison-ci* 'this/the house here' (cf. Anderson and Keenan 1985, Himmelmann 1997, and Diessel 1999, 2005).

Generally, the distance-neutral property can be interpreted as the status of demonstratives lacking a deictic contrast within a single form. However, it does not mean that there is no DISTANCE, but, rather, that there is **potential DISTANCE**, because the distance-neutral demonstratives can combine with other demonstratives with the contrastive values [proximity] and [distal], or often with pointing gestures.

Turning to the issues relating to FIELD, although the *KO*-series of *koko* in FIELD does not mark any notion of DISTANCE, we should carefully distinguish it from distance-neutral, because *koko* of FIELD does not show several aspects known to be characteristics of the distance-neutral demonstratives cross-linguistically. For example, in comparison with German, Japanese *koko*: (i) cannot co-occur with other adjunct demonstratives such as ***das Haus hier*** 'this/the house here', and (ii) cannot co-occur with deictic pointing.[6] I will call the type of deictic properties seen in *koko* of FIELD ''**zero DISTANCE**''[7] in preference to the term distance-neutral, which can have potential DISTANCE and be used along with other demonstratives and deictic pointing. However, the *KO*-series in FIELD never holds any notion of DISTANCE with deictic pointing. Therefore, it can be hypothesized that there are two types of absence of DISTANCE in demonstrative expressions: one is potential DISTANCE and the other zero DISTANCE. *Koko* in FIELD can be classified as the latter category. The characteristics of zero DISTANCE can be defined as when the deictic centre as a zero point of the speech situation diffuses in omnidirectional ways, as seen in Figure (6.4).

In the following sections, let us further consider two critical issues in FIELD: (i) absence of deictic pointing of referents in speech environments, and (ii) construals of hearers in FIELD.

[6] Concerning the difference between the distance-neutral demonstratives and definite articles, Himmelman (1997) and Diessel (1999) suggest that the pragmatic function of demonstratives is to focus the hearer's attention on referents in the speech situation in combination with a pointing gesture, while definite articles do not function to orient the hearer in the surrounding situation.

[7] Zero DISTANCE is not considered to be a unique property of Japanese. For example, when *here* in English behaves like *koko* in FIELD, we can hypothesize that *here* has zero-distance for the same reasons as *koko* in Japanese.

6.2.2 Absence of deictic pointing with demonstratives

The examples of *koko* designating FIELD do not occur with deictic pointing. The case that demonstratives do not require deictic pointing as a pragmatic condition has been indicated in several works such as Price (1953) and Fillmore (1997).

In considering the use of natural signs, Price (1953:165-173) reveals two distinctive functions in deixis: the contrast between heraldic signs, like those outside shops, and arrow-like-signs for directing. The immediate effect of both signs is to draw our attention to a particular spatial location in a spatio-temporal surrounding. The difference between them is whether or not they are accompanied by deictic pointing. He calls the deictic function without pointing gestures ‘‘contextual’’ and the one with pointing ‘‘directional’’. Discussing these concepts, Suzuki (1996:102-9) suggests that only *koko* among Japanese demonstratives lacks the directional function, when it is used as the speaker's position.[8]

In a similar way of thinking, Fillmore (1997:63) proposes two uses of deictic expressions: the ‘‘symbolic’’ and the ‘‘gestural’’.[9] He remarks as follows:

> If during my lecture you hear me use a phrase like ‘this finger’, the chances are fairly good that you will look up to see what it is that I want you to see; you will expect the word to be accompanied by a gesture or demonstration of some sort. On the other hand, if you hear me use the phrase ‘this campus’, you do not need to look up, because you know my meaning to be ‘the campus in which I am now located, and you happen to know where I am’. The former is the gestural use, the latter the symbolic.

The ‘‘symbolic’’ and ‘‘gestural’’ distinctions of linguistic expressions in Fillmore (1997) are equivalent to the ‘‘contextual’’ and ‘‘directional’’ distinction proposed as functions of natural signs in Price (1954).

Let us consider the essence of the symbolic use or the contextual function of deictic expressions. Price (1954:166) suggests, for example, that the verbal symbolism of shop signs implies that what a picture or brass sign depicting brushes says is not just ‘brushes’ but ‘brushes **here**’. Likewise, ‘this campus’ in Fillmore's comment also refers to the place where **I** am **now**. That is, the true character of ‘‘symbolic’’ (Fillmore) or ‘‘contextual’’ (Price) holds

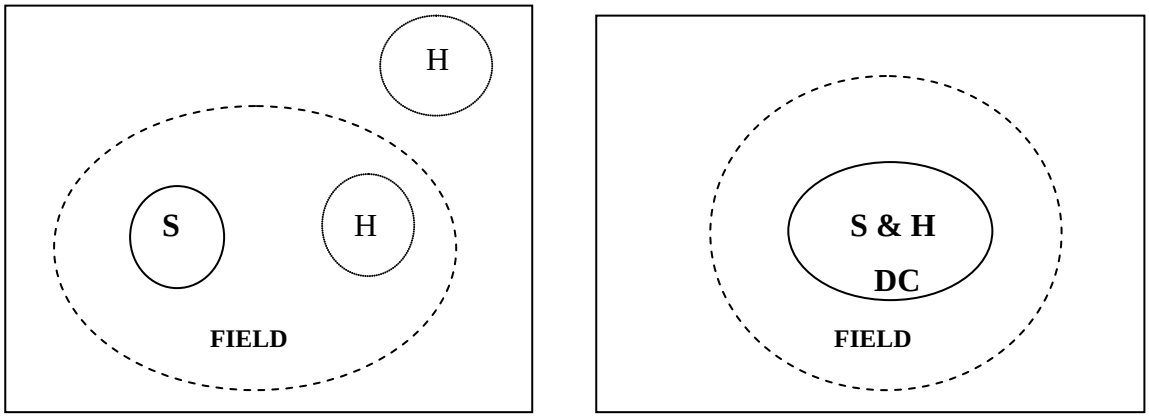
[8] However, as seen in 6.3.1.2, there is a case in which *soko* in LOCATION also has no directional function. Takahashi (1990:8) points out an instance of the lack of deictic pointing with *soko*.
[9] In addition to these two uses, he also adds the ‘‘anaphoric’’ use.

for demonstrative expressions consisting of the deictic centre [I, here, now] as the zero point of the speech situation, regardless of the size of a zone or pointing out.

Consequently, the reason why *koko* in FIELD cannot or need not use deictic pointing pertains to the same characteristics of zero DISTANCE introduced in the last section, which is that a spatial referent in FIELD diffuses in omnidirectional ways from the deictic centre and the *KO*-series in FIELD cannot designate one particular spot in a directional way.

6.2.3 Construals of hearers in FIELD

Next, let us consider the relationship between the presence of hearers and FIELD in the speaker's mind. First of all, we can postulate two cases: the hearer inside FIELD and the hearer outside FIELD, and these are represented in (i) of Figure (6.5), where one hearer is inside FIELD (a large broken circle) and another is outside.



(i) Hearers inside/outside FIELD (ii) Hearer inside the DC

Figure (6.5): Hearers in FIELD

Whenever the speaker designates FIELD, the perceptual and conceptual presence of the hearer in discourse does not affect the speaker's FIELD at all. Firstly, when the hearer is inside FIELD, the deictic centre in FIELD could be extending from [**I**, here, now] to [**we**, here, now] including the hearer, which is represented in (ii) of Figure (6.5). Therefore, the hearer cannot become cognitively salient in the domain distinct from the speaker [I] of the DC.

Secondly, when the hearer is outside the DC, referring to FIELD is not directly relevant to the way the hearer is construed. However, the LOCATION of the Hearer outside the DC can make a deictic contrast against the FIELD, and this is motivated by profiling the hearer in the speaker's construal. I will detail this point in 6.3.2.1. I will also illustrate the two statuses of FIELD with or without deictic pointing in 6.3.3.2.

6.2.4 Summary

Let us represent the *KO*-series in FIELD using the semiotic triangle as follows:

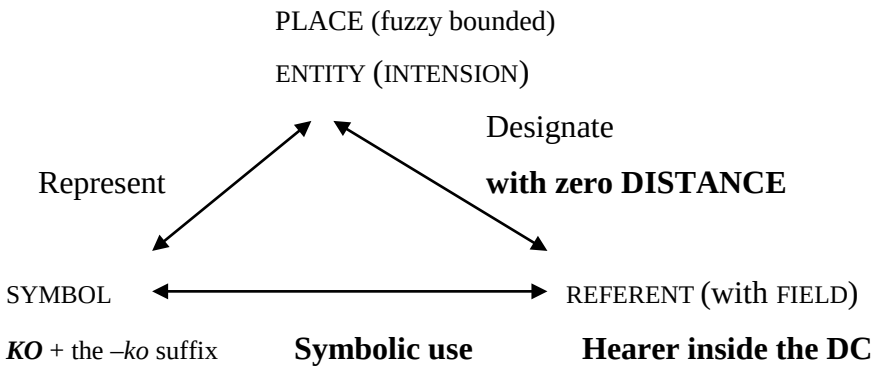


Figure (6.6): The semiotic triangle of *KO* in FIELD

The combination of *KOSOA* and FIELD of the *–ko* suffix is confined to the *KO*-series, where the *KO*-series has no internal deictic contrasts which lead to zero DISTANCE and no deictic pointing (symbolic use). Hearers in FIELD are only construed inside the DC, where the deictic centre is extended from [I] to [we].

FIELD cannot create any deictic contrast inside itself, because there is no possible alternation among *KOSOA*. However, FIELD can mark a deictic contrast against LOCATION. This will be examined in 6.3.2.1. The semiotic triangle in Figure (6.6) will be modified in the conclusion of this chapter.

6.3 LOCATION and *KOSOA*

6.3.1 Hearer inside the DC

Firstly, I will consider the deictic contrasts of LOCATION in **Hearer inside the DC**, where a hearer is absent (in a speaker's monologue) or a speaker does not profile a hearer because s/he includes the hearer in the deictic centre. The deictic contrasts relevant to Hearer inside the DC are DISTANCE and DEFINITENESS, the former of which is expressed by all members of *KOSOA* and the latter by the *SO*- and *A*-series.

6.3.1.1 DISTANCE and *KOSOA*

First of all, let us review how a sense of distance expressed by *KOSOA* has been treated in previous studies. Let us call the deictic contrast of *KOSOA* created by DISTANCE the ''DISTANCE contrast''. As mentioned before, DISTANCE contrast of *KOSOA* has been viewed from a psychological perspective since Sakata (1971) and Horiguchi (1978), in which the speaker's psychological distance[10] is assumed to determine the choice of *KOSOA.*

For example, some experiments conducted by Yoshida (1993) delineate interesting results about the choice of *KOSOA* and physical distance. Consider the depicted situation in Figure (6.7) where a speaker can select *KOSOA* to point out two referents; one is closer to a speaker and smaller than the other (two circles *X* and *Y* represent the size and location of the entities).[11]

[10] If the speaker feels a referent is 'near him', it is 'near' no matter how far away it is and, in a similar way, if the speaker feels a referent is 'far from him', it is 'far' no matter how close it might be in reality.
[11] In Yoshida's article, the two referents are a larger and further one (a building) and a smaller and closer one (a flower bed).

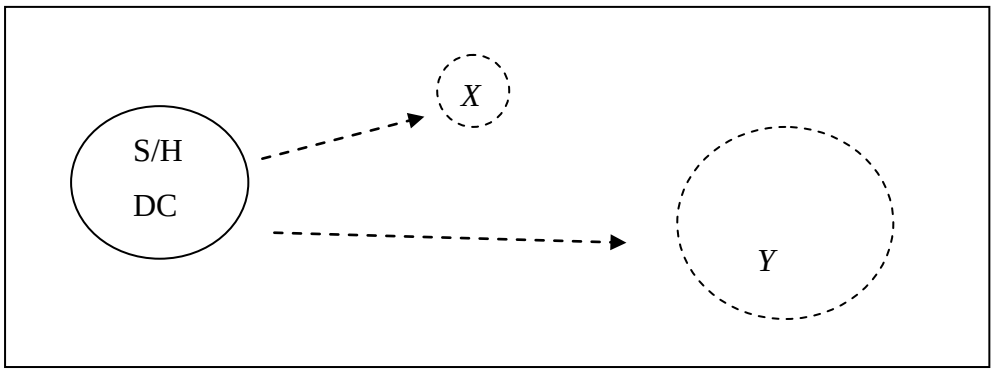


Figure (6.7): A construal of PROXIMITY with the *A*-series

In a typical sense of distance of *KOSOA*, the speaker is expected to employ the *KO*-series for referent *X*, because *X* is closer to him/her than referent *Y*. However, Yoshida's experiment shows that speakers can use the *KO*-series for *Y* and the *A*-series for *X*. Yoshida interprets this phenomenon to be based on the speakers' cognition, i.e. people tend to perceive the bigger object as closer and the smaller one as further away owing to their perspective. That is, even if a spatial referent is in front of and relatively close to a speaker, it is possible to use the *A*-series for DISTAL in some contexts.[12] Therefore, it is considered that the speaker's construal is the most decisive factor and physical distance to referents is a relative matter.

As seen in 3.2.1 in Chapter 3, where Hoji et al. (2003) define *KOSOA* based on speakers' construals, the psychological distance of *KOSOA* in Hearer inside the DC of LOCATION is considered to be a prototypical deictic contrast of *KOSOA*. Concerning the speaker's psychological distance in *KOSOA*, several inquiries reveal that selecting *KOSOA* is dynamically influenced by various positions among speakers, hearers and referents and it is nearly impossible to determine the uses of *KOSOA* by physical distance (Imai 1979, Moriya 1991 and Ishikawa 1992).

Next, the combination of *KOSOA* with the *–ko* suffix in LOCATION is quite different from that with FIELD. Let us recall the image schema of LOCATION before examining *KOSOA*.

[12] As another example, Shooho (1981:67) points out that, when three houses are lined up and the speaker and the hearer are on the right and the left respectively, the speaker can refer to the hearer's house using the *SO*-series and the middle house using the *A*-series, even when the middle house is closer to him than the hearer's place. Some native-speaker judgements do not agree with this observation, but, the important thing is that this use is not impossible. This is a case of a hearer-non profiled use even though it belongs to the category of 'hearers outside the DC', which is considered as an atypical use of the *A*-series in Shooho (in footnote 3). One advantage of the cognitive approach is that it helps to explain how atypical uses of language are motivated.

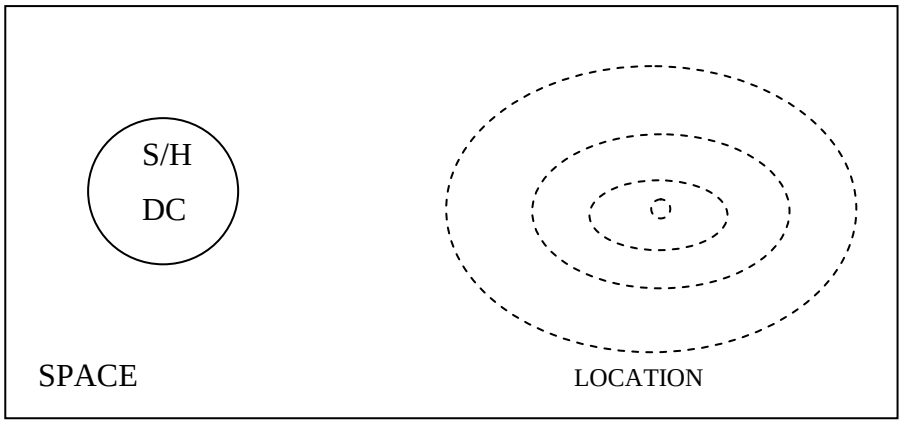


Figure (6.8): LOCATION of the *–ko* suffix

LOCATION consists of fuzzy bounded zones (represented by the broken-lined circles) in the domain SPACE, and must exclude the deictic centre [I]. The spatial referents can extend infinitely from one spot to the universe outside the deictic centre.

All members of *KOSOA* are possible with LOCATION and with the Hearer inside the DC. The following examples were illustrated (cf. (20), (21), (23), (24) in Chapter 5).

(6) (The speaker mentions a particular place in the room, where interlocutors are standing.)
gakki nara {**koko/soko/asoko**} ni ikutsuka arimasu.
Instrument regarding KOko SOko ASOko LOC several exist
'Here are several musical instruments'
WORLD

(7) (The speaker is watching the surface of the river and is ready to jump in.)
{**koko/soko/asoko**} da to omotte chikara o komete ittan
KOko SOko ASOko COP COMP think-LINK power ACC put-LINK once
tobiagatteoite soshite koishika nanzono yooni miren naku
jump-LINK then pebble something like regret without
ochiteshimaimashita.
have fallen
'I thought 'here.' and jumped as hard as I could and then fell like a pebble with no regrets.'
CAT

(8) (The speaker is pointing out a certain area from the top of a mountain.)
{**koko/soko/asoko**} ga watashino machi da
KOko SOko ASOko NOM my town COP
'This is my town.'

(9) (The speaker is pointing out the earth from a space station.)
{**koko/soko/asoko**} ga watashino sumu chikyuu da
KOko SOko ASOko NOM my live earth COP
'This is the earth where I live.'

In (6) to (9) where a hearer is inside the DC, the *KO*-series can be replaced with the *SO*- and *A*-series without changing the physical relationship between the speaker and spatial referents. In all examples, if the speaker feels far enough from the spatial reference, s/he can use the *A*-series, and if s/he feels neither close nor far to it, the *SO*-series is felicitous; otherwise the *KO*-series is possible. Therefore, the above deictic contrast in LOCATION is considered to be **DISTANCE contrast**. It is important to recall that **the *KO*-series in FIELD cannot be substituted with the *SO*- and *A*-series** because of zero DISTANCE (no contrast in terms of the notion of DISTANCE).

In the sense of a ''generally conceived place'', it is hypothesized that people tend to capture distance signified by *KOSOA* as follows (the three solid lines represent the *KO*-, *SO*- and *A*-series from short to long respectively):

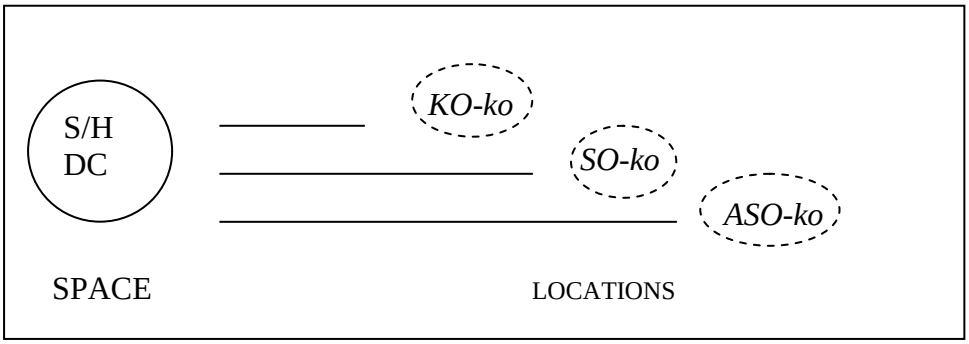


Figure (6.9): An image of 'distance' in a generally conceived place

This image is influenced by simple definitions from dictionaries suggesting that *KO-ko* is a near place, *SO-ko* is a middle distant place and *ASO-ko* is a faraway place. From this kind of image, a misunderstanding seems to occur that there is a one-to-one correspondence between a near place, a middle distance place and a faraway place and the three *KOSOA* series

respectively. However, in a speaker's mind, *KOSOA* can be free applied to one and the same referent, as seen in the following figure.

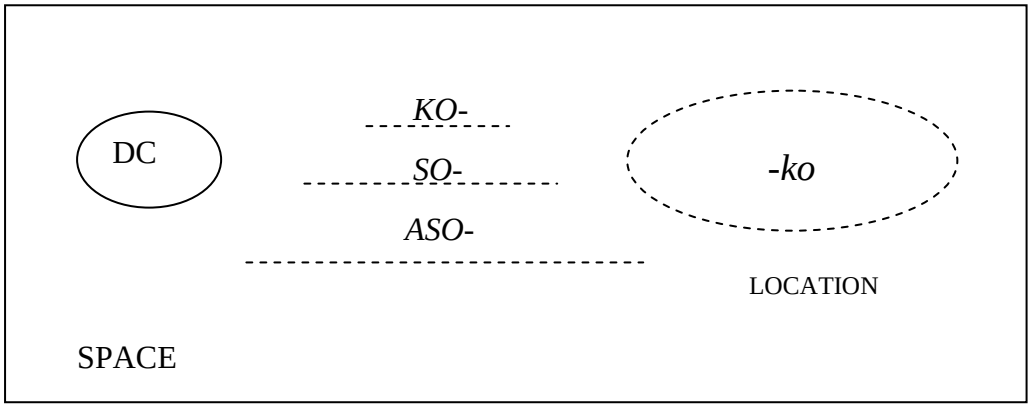


Figure (6.10): LOCATION with DISTANCE contrast

Significantly, the cognitive approach highlights that there is one place which can be designated by all of *KOSOA*. That is, a sense of DISTANCE in the DISTANCE contrast is not affected by perceptual or physical distance such as one metre, five metres or ten metres to the place; rather, it is a matter of the speaker's psychological distance. This means that PROXIMITY in the *KO*-series, neither PROXIMITY nor DISTAL in the *SO*-series and DISTAL in the *A*-series are subjective judgements with LOCATION of the *–ko* suffix in Hearer inside the DC. That is, **the speaker's construal of the situation is motivated by psychological distance**.

As seen in FIELD, if the different *KOSOA* series are not interchangeable, it means there is a lack of a deictic contrast within the notion of DISTANCE in order to identify referents. Therefore, a good way to check the psychological distance of *KOSOA* is to investigate the choice of *KOSOA* with the *–ko* suffix.

6.3.1.2 DEFINITENESS contrast and the *SO*-series and the *A*-series

''DEFINITENESS'' is a deictic contrast that is relevant in the choice between the *SO*- and *A*-series in LOCATION with Hearer inside the DC. Concerning demonstratives marking definite/indefiniteness, Givón (1984:418-9) presents the English examples:

(10) I saw **this** girl yesterday, and…

(11) I saw **that** girl yesterday, and …

The above two demonstrative modifiers can be contrasted as indefinite in (10) and definite in (11), where unstressed *this* in (10) implies that the hearer is not expected to know the girl's identity, and *that* in (11) implies that the hearer is assumed to know the girl's identity.

Let us illustrate Japanese spatial demonstratives in terms of definiteness.[13]

(13) Boku wa kore kara Nihombashi no Engeekyoofuukai ni
I TOP now from Nihonbashi GEN Engeekyoofuukai LOC
ikanakuchanaran kara **soko** made isshoni ikoo.
must go because SOko by together let's go
'I have to go to the Engeekyoofuukai in Nihombashi. So, let's go together just around there.'
CAT

In (13), *soko* is not exchangeable with the *KO*- or the *A*-series in terms of the psychological distance from the deictic centre (if the speaker feels a referent is 'near him', it is considered 'near' no matter how far away it is in reality). That is, in contrast with the case of psychological distance where a speaker can choose *KOSOA* depending on a construal, **the *SO*-series cannot be replaced with any other deictic root** according to the speaker's sense of DISTANCE.

The most important characteristic of this use is that the expression *soko* does not refer to a particular place (as referential token), and this is not shared with the hearer. That is, *soko* in (13) has an indefinite status.

A comparison of the above example with the following example can evince a different type of deictic contrast from DISTANCE in LOCATION with *KOSOA*.

[13] Concerning ''DEFINITENESS'' in the anaphoric use with *kono* and *sono* NP, I reviewed Iori's works in 3.2.3.2.

(14) **Asoko** made isshoni ikoo.
ASOko until together let's go
'Let's go to that place.'

If the *A*-series is used for the same context as (13), both the speaker and the hearer must be able to identify a particular place, for example a place where they often go together, even though it is not overtly mentioned. That is, in contrast to using *soko* in (13), *asoko* in (14) has a definite status. The semantic difference between 'indefinite' and 'definite' corresponds to a difference between selecting the *SO*-series forms and the *A*-series forms. Let us call it **DEFINITENESS contrast**. In previous studies, the difference between the *SO*- and *A*-series as seen in (13) and (14) has been discussed under different pragmatic uses: the former is the exophoric use and the latter is the recognitional use as introduced in 2.3.2. Thus, there is no semantic analysis of these uses of the *SO*- and *A*-series in terms of the deictic contrast, such as the definite/indefinite status of the referents.[14] However, this thesis employs the EXOPHORIC use (exophoric and recognitional uses) to deal with various deictic contrasts in a systematic way of conceptualization, instead of in terms of differences of pragmatic uses.

Next, by means of the Mental Space model introduced in 4.5, I will explain the motivation for the speaker's construal with DEFINITENESS contrast. The following picture represents how to connect a referent between the speaker's space and the hearer's space, where *V* stands for ''value'' for the *–ko* suffix[15] and *Ø* of *SO-ko* in Hearer's space 1 indicates that the value is an empty set.[16] It should be noted that hearer spaces are also construed in the speaker's mind, not in the hearer's mind.

[14] It should be noted that the *A*-series in the recognitional use does not always have the DEFINITENESS contrast of the *SO*-series.
[15] The *–ko* suffix is a ''role'' of a referent in a sense of the Mental Space model.
[16] Takubo (2010) uses the theory of Mental Spaces to discuss how to introduce proper nouns into discourse without a shared value with the hearer.

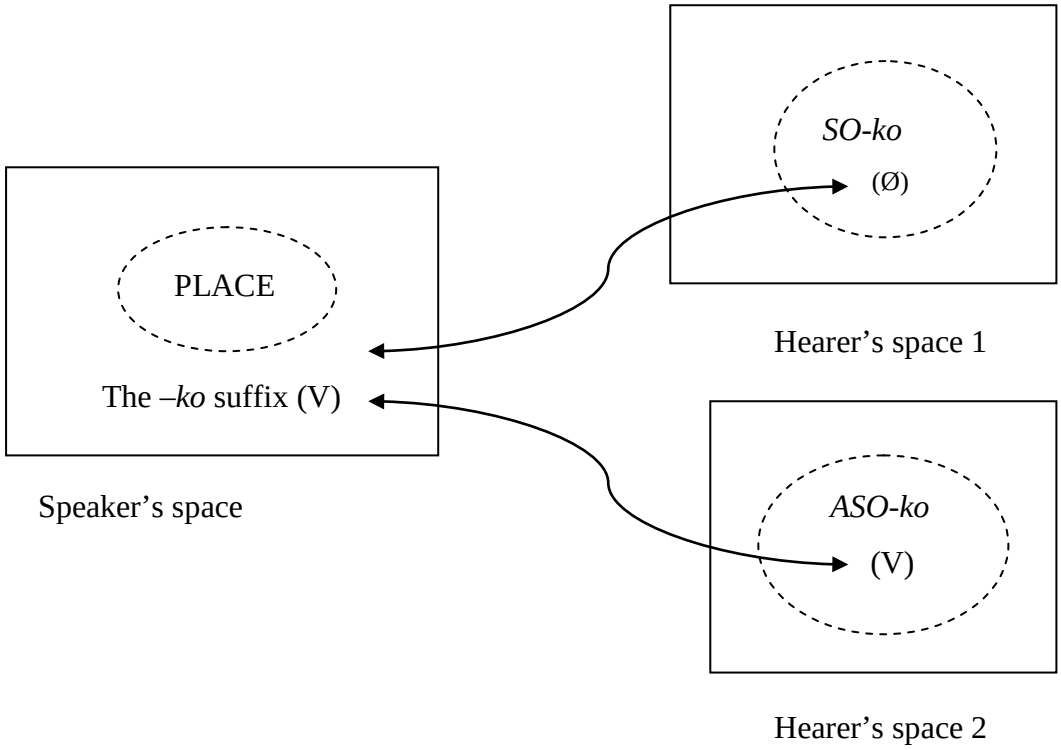


Figure (6.11): Two Mental Spaces of the hearer in the speaker's construal

In Figure (6.11), when the speaker has a value for the *–ko* suffix in the Speaker's space, s/he can construe the Hearer's space in two ways: Hearer's space 1 has no corresponding value in the *–ko* suffix and is linked with the *SO*-series, while Hearer's space 2 has the same value of the *–ko* suffix in Speaker's space and is linked with the *A*-series. The former conceptualizes the indefinite status of a referent and the latter the definite status represented by the solid arrows and circle in Figure (6.11). That is, the motivation for using DEFINITENESS contrast is to express whether a value of the *–ko* suffix can be connected with the same value in Hearer's space or not.[17]

Finally, I will investigate a contrast between the *SO*- and *A*-series in terms of the referent as specific or non-specific to the speaker.[18] The technical notion ''specificity'' relates to whether **the speaker identifies a referent as a unique token**, irrespective of the hearers' status of knowledge, whereas definite and indefinite distinctions indicate whether the

[17] Although some studies (including Okazaki 2010) consider the indefiniteness of the *SO*-series as seen in (13) as an exception or an idiomatic expression, the cognitive approach can explain its meaning including a speaker's construal and a motivation of the deictic contrast systematically.
[18] Definite referents (not definite NP) are always specific. 4.5 has presented the analysis of specific/non-specific reference from the theory of Mental Spaces.

speaker assumes that **the hearer can identify a referent as a unique token**. In example (13) of indefiniteness with *soko*, both specific and non-specific interpretations are available: (i) if it is specific, the speaker has a particular referential image about where s/he will go and (ii) if it is non-specific, the speaker does not have any particular referential image and has not decided how far to accompany the hearer. In either case, hearers cannot identify any particular referent.[19]

Let us depict the DEFINITENESS contrast in terms of specificity of referents, where *ASO-ko* creates a definite LOCATION and *SO-ko* creates two indefinite LOCATIONs: 'specific' and 'non-specific' ('Non-specific' is represented by a larger and thinner circle than 'specific') as follows:

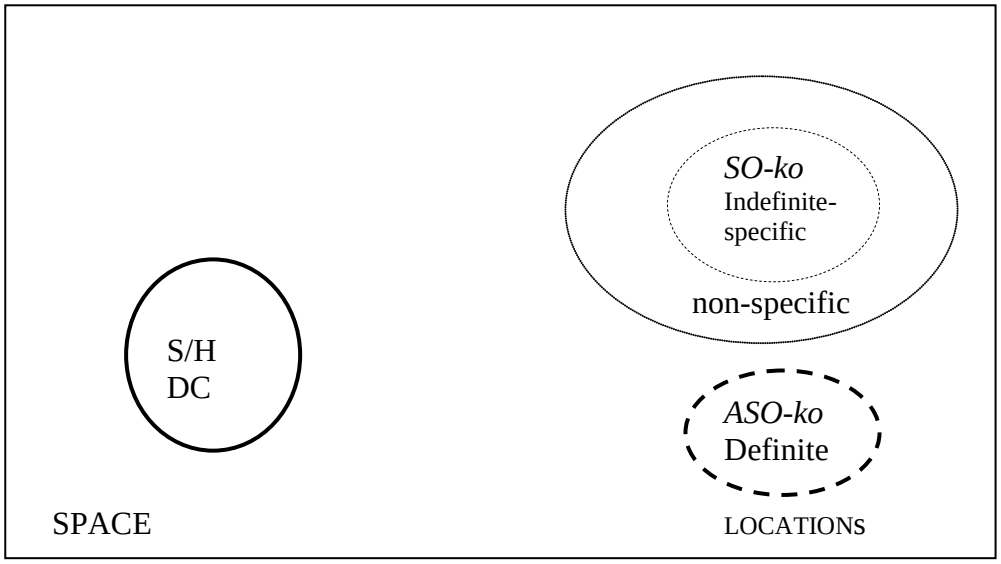


Figure (6.12): Specificity of LOCATIONs with DEFINITENESS contrast

The significance of emphasizing three different circles of *SO-ko* and *ASO-ko* in Figure (6.12) relates to the referential status of LOCATION, i.e. definite referents are always specific but indefinite ones are either specific or non-specific, which suggests that the referent of *SO-ko* can be less identifiable than a referent of *ASO-ko* within the definiteness-contrast. We can describe the identifiability of spatial referents in the following gradation of the DEFINITENESS contrast.

[19]Strictly speaking, ''specificity'' has a semantic sub-division, where ''specific'' may be 'known to the speaker' or 'unknown to the speaker' and ''non-specific'' is only 'unknown to speaker' (Haspelmath 1997a). In Moore (2003), Japanese *ka*-indefinites such as *dare-ka* 'somebody' and *doko-ka* 'somewhere' have the semantic domain of 'unknown to the speaker'. Concerning ''specificity'' of referents, see Karttunen (1971), Lyons (1977), Hawkins (1978), Givón (1984), Lambrecht (1994), and Lyons (1999).

More identifiable Less identifiable

ASO-ko (definite) > *SO-ko* (indefinite/specific) > *SO-ko* (indefinite/non-specific)

Even though not marked grammatically, the DEFINITENESS contrast can show a rigorous semantic division of identifiability between *SO-ko* and *ASO-ko*.[20] I will discuss the DEFINITENESS contrast of LOCATION for temporal expressions in 7.3.7.

6.3.1.3 Semantic, morphological and cognitive differences of two deictic contrasts

Summing up, with LOCATION with Hearer inside the DC, I have shown that the alternation of deictic roots can be examined in terms of two deictic contrasts, i.e. DISTANCE and DEFINITENESS, where only particular sets of morphological options are possible with different deictic contrasts. This section will review these two deictic contrasts (DISTANCE and DEFINITENESS) from the perspective of morphological, semantic and cognitive differences in their image schemas. First of all, look at example (6) of the DISTANCE contrast again.

(6)' (The speaker mentions a particular place in the room, where interlocutors are standing.)

Gakki nara {**koko/soko/asoko**} ni ikutsuka arimasu

instruments regarding KOko SOko ASOko LOC several exist

'Here are several musical instruments'

WORLD

This example can be explained from two aspects of the deictic contrast: one is the semantic aspect (PROXIMAL and DISTAL) and the other is the morphological aspect (the *KO*-, *SO*- and *A*-series), and this can be represented in the following Figure (6.13).

[20] The indefinite/non-specific referent of the *SO*-series can be observed in several idiomatic expressions such as *dare-**so**re* 'Mr. So-and-so' and *doko-**so**ko* 'such and such a place'.

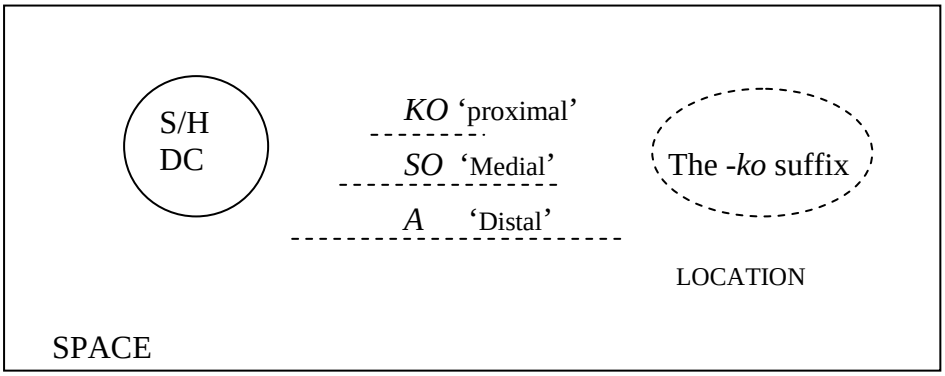


Figure (6.13): Semantic and morphological aspects in DISTANCE contrast

In Figure (6.13), the semantic aspect (PROXIMAL and DISTAL) can be seen as the relationship between the deictic centre (DC) and LOCATION of the *–ko* suffix. The morphological aspect can be found in the combination of the *–ko* suffix among the *KO-*, *SO-* and *A*-series. Each morpheme of the deictic root corresponds to its own semantic property, which is motivated by psychological distance in the speaker's construal.

Next, let us illustrate an instance of the DEFINITENESS contrast again.

(15) {**Asoko** / **Soko** } made isshoni ikoo.
ASOko SOko by together let's go
'Let's go to {that place / around there}.'

As explained in 6.3.1.2, the *A*-series refers to the place which both the speaker and the hearer can identify as a definite LOCATION, but the *SO*-series does not because it refers to an indefinite LOCATION. This can be represented in the following image, where the circle of *SO-ko* is drawn with thinner broken lines than that of *ASO-ko*, which represents the fact that *ASO-ko* is definite and *SO-ko* is indefinite.

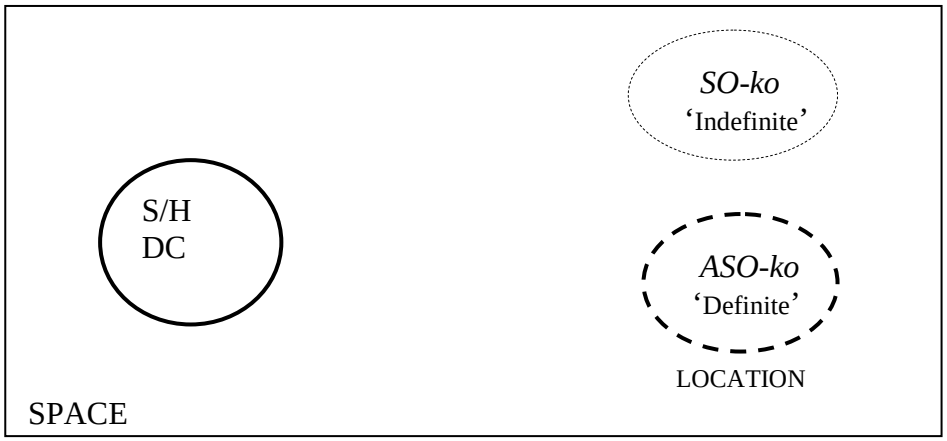


Figure (6.14): Semantic and morphological aspects in DEFINITENESS contrast

Firstly, consider the semantic aspect. Compared with the DISTANCE contrast in Figure (6.13), no sense of DISTANCE occurs between the deictic centre and LOCATIONs in Figure (6.14); rather, the contrast is observed between two different referents in LOCATIONs. In terms of the morphological aspect, the deictic contrast is created by choice between the *SO*- and *A*-series, but not the *KO*-series. As seen in Figure (6.11), that motivation is whether or not the speaker can construe a connection with the same value as the referent between the Speaker's space and the Hearer's space.

Let us summarize what is uncovered in Figure (6.13) and (6.14) with their cognitive motivations.

Table (6.1): Differences between DISTANCE and DEFINITENESS contrasts

Deictic contrast	DISTANCE			DEFINITENESS	
Morphological	*KO-*	*SO-*	*A-*	*SO-*	*A-*
Semantic	Proximal	Medial	Distal	Indefinite	Definite
Cognitive	Psychological distance			Connecting the same value of identifiability between Speaker and Hearer Spaces	

Table (6.1) shows that each deictic contrast has its own pairs of deictic morphemes, which correspond to their semantic differences and cognitive motivations.

6.3.2 Hearer outside the DC

In this section, I will now elaborate on the relationship between *KOSOA* and LOCATION of the *–ko* suffix in **Hearer outside the DC**, the situation which motivates a speaker to profile a hearer when construing referents. We have to be careful about the following two facts: (i) it is not obligatory to profile a hearer just because of the presence of a hearer in a given situation and (ii) the presence of a hearer is not always based on a physical presence, for example, in a conversation via telephone, because it is a matter of the speaker's construal in SPACE.

6.3.2.1 PERSON contrast and the *KO*-series and the *SO*-series

First of all, I will demonstrate a typical speech situation to denote the hearer's LOCATION in Hearer outside the DC.

(16) (A speaker talks to a hearer by phone.)
Mada **soko** ni ita no.
still SOko LOC existed SF
'You are still there.'
WORLD

In this example, physical or perceivable distance is naturally irrelevant to the communication, because it takes place via phone. The alternation between the *SO*-series and other series is not possible and only the *SO*-series can be used in this situation, which supports the fact that the deictic contrast is not DISTANCE.

Let us represent the non-distance features for the hearer's LOCATION in Hearer outside the DC in the following Figure (6.15). As I explained in the last section, DISTANCE of *KOSOA* in SPACE can be supposed to occur between the deictic centre and LOCATION, when the hearer is **inside** the DC. However, the following Figure shows no sense of distance between the DC and the spatial referent of the hearer, when the hearer is **outside** the DC.

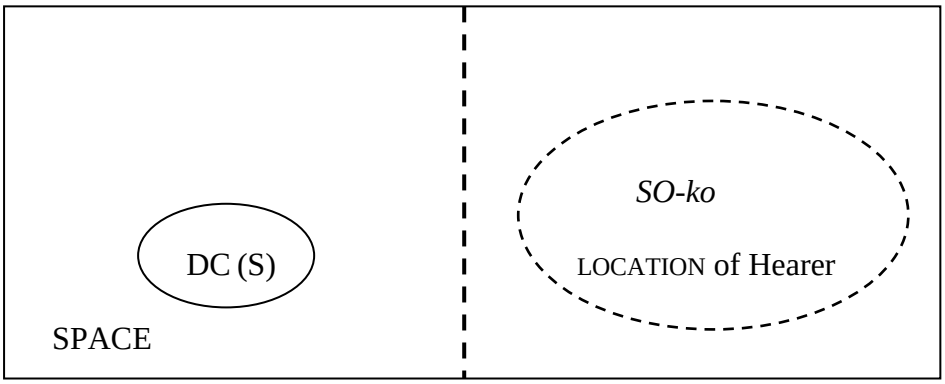


Figure (6.15): LOCATION in Hearer outside the DC via phone

The vertical centre line represents a virtual division between the DC of the speaker and LOCATION of the hearer, where DISTANCE cannot be established. The expression *soko* designates LOCATION of a hearer in the given situation construed as ‘‘Hearer outside the DC’’. The *SO*-series is often called the hearer’s *SO*, which **is motivated by ‘‘Hearer profiled’’ in the speaker’s construal**. It should be noted that the construal of Hearer outside the DC does not always trigger the speaker to create Hearer profiled to denote the hearer’s LOCATION, which will be discussed in the next section.

As remarked in 6.2.1, FIELD cannot create any deictic contrast itself because there is no alternation of *KOSOA*. However, as seen in the following Figure (6.16), we can propose that FIELD of *koko* can have a deictic contrast with LOCATION of *soko*, where the hearer is profiled as outside the DC.

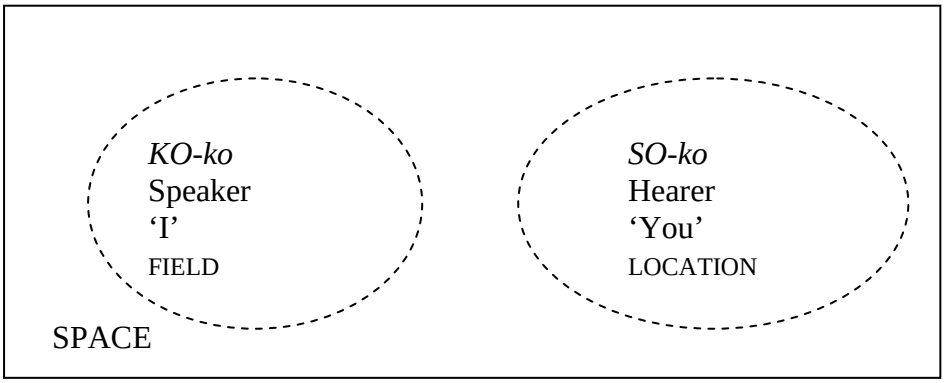


Figure (6.16): PERSON contrast between FIELD and LOCATION

Considering the deictic contrast, Figure (6.16) reveals that the *KO*-series in FIELD and the *SO*-series in LOCATION are metonymically represented as [I] of the deictic centre and [you] as the hearer's place respectively. For example, the expression *soko* can be rephrased as *anata no iru tokoro* 'the place where you are' in the discourse context. Therefore, I will regard this type of deictic contrast as **PERSON contrast**.[21] Let us summarize the above discussion.

Table (6.2): PERSON contrast between FIELD and LOCATION

Morphological contrast	*KO*-	*SO*-
Semantic contrast	Speaker's FIELD	Hearer's LOCATION
Cognitive motivation	[here] of the DC profiled[22]	Hearer profiled
Types of construal	Hearer inside the DC	Hearer outside the DC

When a speaker construes a given situation as **Hearer outside the DC** and designates LOCATION of a hearer, it triggers **the selection of the *SO*-series** among *KOSOA* and creates **PERSON contrast**, which is motivated by **profiling a hearer**. In other words, the morphological aspect of the PERSON contrast occurs between the *KO*- and *SO*-series and the semantic aspect of the PERSON contrast can be observed between Speaker/FIELD and Hearer/LOCATION**.** The cognitive motivation of the PERSON contrast is whether or not Hearer profiled occurs in Hearer outside the DC.

[21] In order to avoid confusion about terminology, the difference between distance- and person-**oriented system** and DISTANCE and PERSON **contrast** should be clarified. As introduced in 2.2.2.1 and 3.2.1.1, two major types of the deictic systems of demonstratives have been proposed in previous studies: one is ''distance-oriented'', the semantic value of which is based on a sense of distance such as [proximal] and [far] from the deictic centre, and the other is ''person-oriented'', which is based on [proximal] to the deictic centre or a hearer.

In typological classifications, the Japanese demonstrative system is generally classified as person-oriented so that one use of the *SO*-series of Japanese demonstratives is relevant to a hearer (Anderson and Keenan 1985 and Diessel 1999).

However, it should be noted that types of orientations in a **demonstrative system** differ from types of **deictic contrasts** among demonstrative expressions. That is, whether demonstratives in a language are person-oriented or distance-oriented is a matter of a characteristic tendency **within a system of demonstratives**, while the deictic contrasts that appear **among various sets of demonstrative expressions** can have multiple contrasts such as between two demonstrative expressions or three or more. For example, the PERSON contrast of Japanese demonstratives is observed between the *KO*- and the *SO*-series, whereas the term ''person-oriented'' is used for explaining the system of using *KOSOA*. This thesis is focusing on what types of deictic contrasts can be observed among the spatial demonstratives with extensional properties of the *–ko* suffix.

[22] 5.3.4 explained how to profile [here] of the DC [I, here, now] in a construal.

6.3.2.2 Motivation shift of deictic contrasts from Hearer profiled to psychological distance

In the previous sections, we examined DISTANCE contrast in **Hearer inside the DC** and PERSON contrast in **Hearer outside the DC**. However, sometimes DISTANCE contrast overrides the expected PERSON contrast when the hearer is construed outside the DC. I will explain this phenomenon as a motivation shift of the deictic contrasts in the speaker's construal.

In the following example, with a pointing action the speaker refers to a hearer's LOCATION with the construal of Hearer outside the DC, and this does not fit in the observations we have made so far.

(17) (Several people are conversing and the speaker mentions one particular person among the hearers.)

Soo yuu hito ga genni **koko** ni iru kara tashikana mono da
so saying person NOM really KOko LOC exist because certain COMP COP
'It is certain, because there is such a person here.'
CAT

Using deictic pointing indicates that the spatial referent is not FIELD and the speaker construes the situation as Hearer outside the DC. However, *koko* is used to denote the hearer's LOCATION with psychological distance PROXIMAL.

In a canonical interpretation, because a hearer's position is referred to perceptually, the *SO*-series seems to be appropriate for **Hearer outside the DC with PERSON contrast**. Let us replace *koko* with *soko* as follows:

(18) (Several people are conversing and the speaker mentions one particular person among the hearers.)

Soo yuu hito ga genni **soko** ni iru kara tashikana mono da
so saying person NOM really SOko LOC exist because certain COMP COP
'It is certain, because there is such a person there.'

There is no change in physical distance between the speaker and hearers and *soko* is perfectly acceptable, which indicates that the deictic contrast is PERSON. However, in the original text CAT, ***koko* is used to refer to LOCATION of a hearer** chosen from several hearers.

This alternation between *soko* and *koko* can be interpreted as a motivation shift from Hearer profiled to psychological distance for designating a hearer's LOCATION. Typically, Hearer profiled occurs when ''Hearer'' has more cognitive salience than other entities in a domain, but, if the LOCATION itself has more salience than ''Hearer'' in a construal, it motivates the speaker to designate the referent with psychological distance. In fact, as a pragmatic effect, using the *KO*-series can be supposed to create a ''vividness effect''.[23]

The following mental processes for the above motivation shift can be hypothesized: (i) when a discourse situation is construed as Hearer outside the DC, it can motivate the speaker to express either Hearer profiled or psychological distance, (ii) if ''Hearer profiled'' is chosen, then typically the speaker uses the *SO*-series for the PERSON contrast, (iii) if psychological distance is selected instead of Hearer profiled, the speaker employs the *KO*-series for the DISTANCE contrast. That is, even though the speaker construal of Hearer outside the DC is unchanged, the motivation of the speaker for designating a spatial referent can shift from Hearer profiled to psychological distance, so that the deictic contrasts are changed from PERSON as a canonical deictic contrast to DISTANCE, and the choice of deictic root also changes from the *SO*-series to the *KO*-series.

Another important finding from this example is that the perceptual presence of a hearer does not always trigger PERSON contrast. In other words, although a hearer may be standing in front of a speaker, the speaker need not express Hearer profiled and identify a hearer's LOCATION based on psychological distance. That is, ''Hearer profiled'' realized by demonstratives is **virtual, not visual**.[24]

Let us summarize the motivation shift from Hearer profiled to psychological distance in Hearer outside the DC of a speaker's construal to refer to a hearer's LOCATION:

[23] ''Vividness effect'' of the *KO*-series in the anaphoric use was presented in 3.2.3.1. In terms of pragmatic effects in demonstratives, Lakoff (1974) employs ''emotional deixis'', in which the use of *this* creates vividness in referents and the use of *that* establishes emotional closeness between a speaker and a hearer as solidarity. Several differences in pragmatic effects are suggested by contrastive analyses between English and Japanese (Ueno et al 1984, Andoo 1986, Chiba and Murasugi 1987 and Niimura 1997, 1998).

[24] DISTANCE contrast is strongly psychological. This will be discussed again in 6.4.4.

Table (6.3): Motivation shift in Hearer outside the DC

Shift	From	TO
Cognitive motivations	Hearer profiled	Psychological distance
Deictic roots	the *SO*-series	the *KO*-series
Deictic contrasts	PERSON	DISTANCE

I will discuss a motivation shift to refer to speaker's and hearer's PART in 6.4.4.

6.3.3 Deictic pointing and LOCATION

In the following sections, let us elaborate on the relationship between deictic pointing and the deictic contrasts from two points of view: (i) co-occurrence of deictic pointing in each deictic contrast and (ii) a construal shift from Hearer outside the DC to inside the DC by deictic pointing.

6.3.3.1 Co-occurrence of deictic pointing with each deictic contrast

In 6.2.2, we saw that no deictic pointing occurs in FIELD, because a spatial referent in FIELD diffuses in omnidirectional ways from the deictic centre and the *KO*-series in FIELD cannot refer to one particular spot in a directional way. FIELD is considered to be motivated by profiling [here] of the DC, which is a symbolic function rather than a gestural function. By contrast, LOCATION in three deictic contrasts (DISTANCE, DEFINITENESS, and PERSON) shows various possibilities of co-occurrence with deictic pointing (gestural function) to specify referents.

Firstly, I will investigate the relationship between deictic pointing and DISTANCE contrast. All examples from (6) to (9) seen in 6.3.1.1 can be accompanied with deictic pointing. They can be considered to be prototypical cases of gestural function, for which reason demonstratives belong to a group of phenomenon called ''deixis'' (''pointing'' in Latin). Look at the following schema, where arrows with *KOSOA* represent deictic pointing.

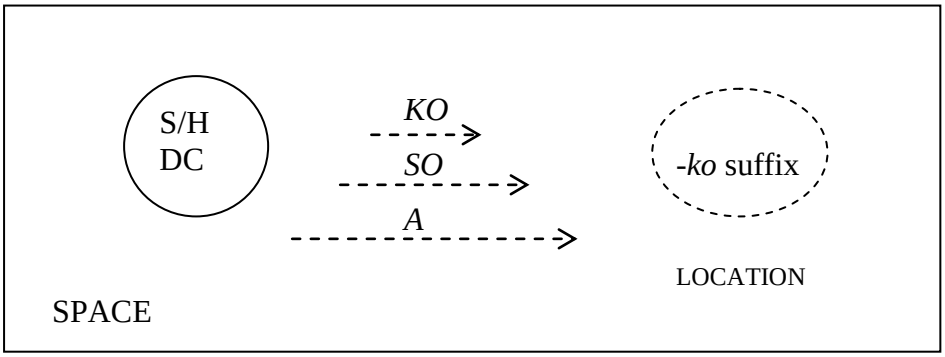


Figure (6.17): Deictic pointing in LOCATION with the DISTANCE contrast

Figure (6.17) shows that deictic pointing is **necessary** for all members of *KOSOA*, regardless of how far or close the referent is located from the deictic centre.

On the other hand, the relationship between the **DEFINITENESS contrast** and deictic pointing shows some gradation between the *SO*-and *A*-series in LOCATION according to conditions as follows:

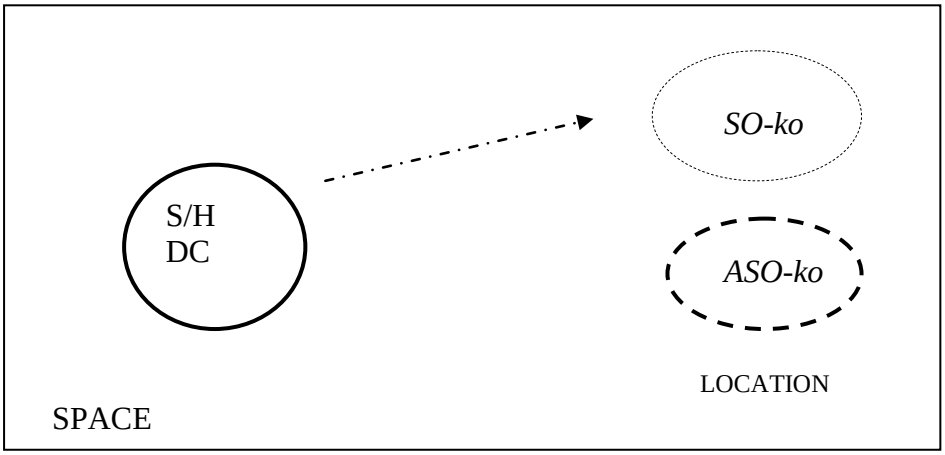


Figure (6.18): Deictic pointing in LOCATIONs with the DEFINITENESS contrast

SO-ko with the DEFINITENESS contrast is indefinite and has two different cases based on identifiability: (i) if a spatial referent is non-specific, deictic pointing is **impossible**, because a speaker himself has no referential token in his mind, but (ii) if a spatial referent is specific, it is **possible** for a speaker to use deictic pointing in order to indicate the direction of a referential place. The reason why it is **possible instead of necessary** in (ii) is because the motivation for using *SO-ko* in the DEFINITENESS contrast is to express that there is no connection of referential values (individual token) between the speaker's and hearer's spaces. In everyday conversations, we can often observe that a pointing gesture can even be directed above the speaker's head, when the speaker says ''*chotto soko made*'' 'just around the

corner'. That is, in contrast to the DISTANCE contrast, indefinite/specific *SO-ko* need not demonstrate a clear direction to a spatial referent, and this is represented as a vague arrow from DC to *SO-ko* in the above Figure.

In the case of *ASO-ko* in Figure (6.18), even if a referential place designated by the *A*-series is visible, deictic pointing is **unnecessary**, because the original motivation for using the *A*-series with the DEFINITENESS contrast is to express that the speaker assumes that there is the same value in the speaker's and hearer's spaces. In other words, deictic pointing is redundant in specifying a referent in a given situation, but it can be used for pragmatic effects such as ''solidarity'' for other discourse participants or ''secrecy'' among interlocutors.[25]

The difference between ''**possible**'' deictic pointing associated with DEFINITENESS contrast (indefinite/specific) and ''**unnecessary**'' deictic pointing associated with DEFINITENESS contrast (definite) is that the possibility of deictic pointing totally depends on a speaker's mind (it is pragmatically optional) but non-necessity indicates that deictic pointing is not needed in a default status even though it is possible.

Finally, concerning **PERSON contrast** of LOCATION in Hearer outside the DC, deictic pointing is **unnecessary** in default (unless a speaker strongly profiles a hearer), because *soko* with PERSON contrast indicates the place where the hearer is.

(16)' (A speaker talks to a hearer by phone.)
Mada **soko** ni ita no.
still SOko LOC existed SF
'You are still there.'
WORLD

As seen in the above example, even in the situation without deictic pointing (via phone), the *SO*-series in LOCATION with the construal of Hearer outside the DC can create PERSON contrast to designate the hearer's place.

Let us summarize types of co-occurrence between deictic pointing and deictic contrasts in a gradation.

[25] Horiguchi (1992:82-3) illustrates ''solidarity'' in the following conversation between A and B: A: ***Are*** *o motte kite kure*. 'Bring that to me.' B: *Hai* 'yes'. If the hearer B can understand what is referred to by only *are* 'that', it indicates a kind of solidarity (I know what you say without saying everything). In fact, among close friends and family members, the *A*-series is often used instead of expressing full NPs. Generally, the *A*-series is employed to express a taboo. One typical example of ''secrecy'' is seen in sexually related contexts, e.g., if *asoko* is used to refer to a body part in the deictic use without pointing, it denotes the sex organs.

Table (6.4): The gradation of co-occurrence relation between deictic contrasts and deictic pointing

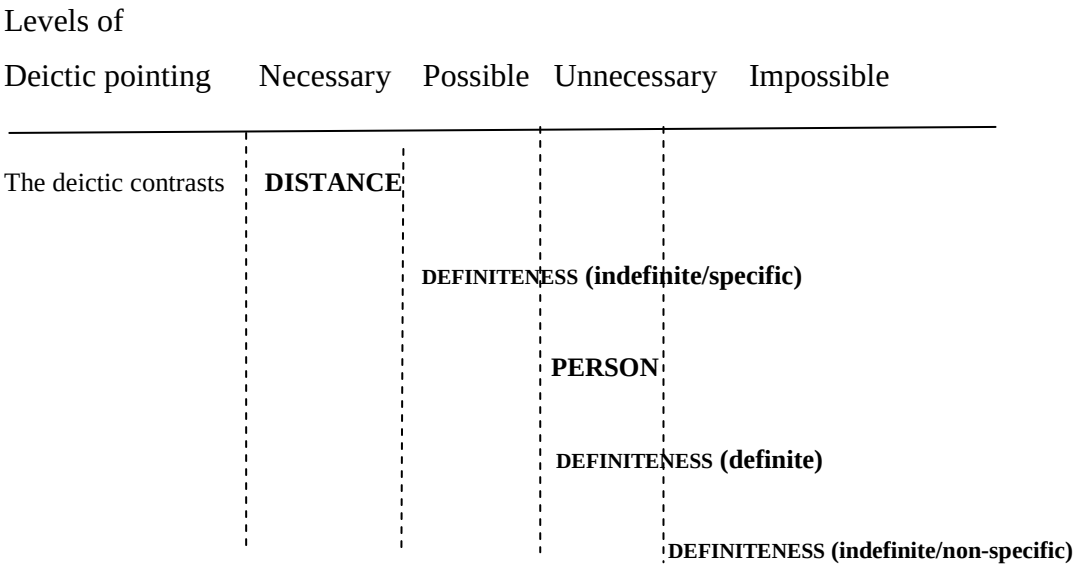


Table (6.4) represents various levels of co-occurrence between deictic pointing and the deictic contrasts in LOCATION, where ‘‘necessary’’ indicates prototypical uses of deictic pointing, ‘‘possible’’ for optional uses, ‘‘unnecessary’’ for no use in default and ‘‘impossible’’ for no use in any context. That is, deictic pointing shows different sensitivities to each deictic contrast.

6.3.3.2 Construal shift from Hearer outside the DC to inside the DC and deictic pointing

In 6.3.2.2, I demonstrated how the motivations of signalling the deictic contrasts can shift from Hearer profiled to psychological distance, when the speaker’s construal Hearer outside the DC is unchanged, which causes an alternation of the deictic roots from the *SO*-series to the *A*-series and deictic contrasts from PERSON to DISTANCE. This section will show that the speaker’s construal can shift from Hearer outside the DC to Hearer inside the DC for denoting LOCATION by means of deictic pointing.

Observe the following example in (19), a canonical interpretation of which is that the speaker construes the situation as Hearer outside the DC and creates PERSON contrast motivated by ‘‘Hearer profiled’’ by means of using the *SO*-series.

(19) (An unknown speaker accosts protagonists in a dark cavern)

Chotto **soko** ni suwatte ore no hanashi o kiite

a little SOko LOC sit down-LINK I GEN story ACC listen to-LINK

kure yo

please SF

'Sit there and listen to my story'

WORLD

However, example (19) can be used in an alternative situation, where a speaker may point to a particular place for the hearer to sit down. In that case, LOCATION of the hearer has to move and the speaker can use all of the *KO*-, *SO*- and *A*-series options to designate the same referential place motivated by psychological distance, e.g. *Koko ni suwatte* 'Sit here', *Soko ni suwatte* 'Sit there' or *Asoko ni suwatte* 'Sit over there', which indicates that the deictic contrast is the DISTANCE contrast instead of the PERSON contrast. Let us represent the difference of making the deictic contrasts with or without deictic pointing.

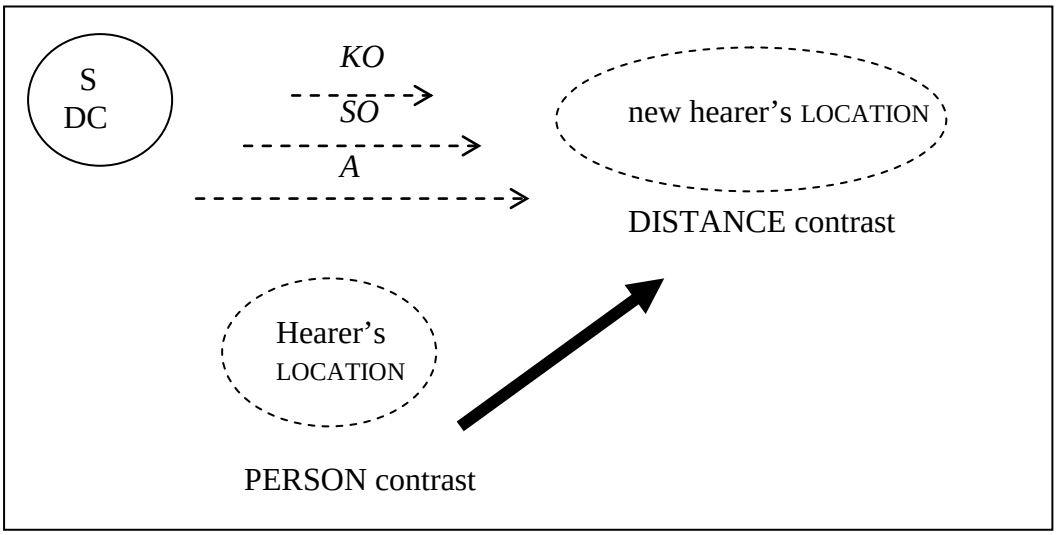


Figure (6.19): From the PERSON contrast to the DISTANCE contrast

The black arrow from the PERSON contrast to the DISTANCE contrast stands for the shift of the deictic contrasts with deictic pointing. Using the *SO*-series without deictic pointing refers only to the place **where a hearer is** (Hearer's LOCATION) and has no sense of DISTANCE. However, deictic pointing creates a sense of DISTANCE in a certain direction to **a new**

hearer's LOCATION, and this enables all members of *KOSOA* between the speaker of DC and the hearer.

The significant point of this phenomenon is that the change of the deictic contrasts is created not only by perceptually using deictic pointing but also conceptually by a construal shift from Hearer outside the DC to inside the DC without the Hearer moving an inch, depicted as follows:

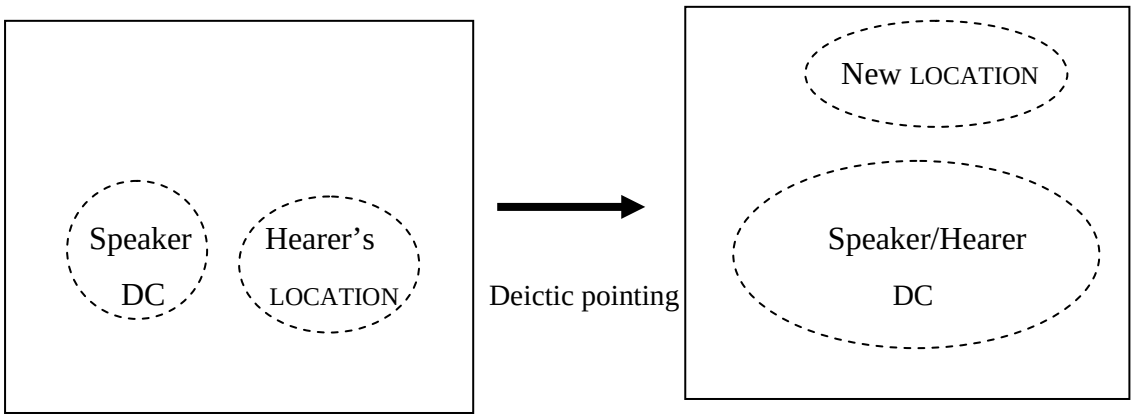


Figure (6.20): A construal shift from Hearer outside the DC to inside the DC by deictic pointing

Considering the change of the deictic contrasts from PERSON to DISTANCE, using deictic pointing and including the hearer in the DC can be supposed to be the first step of a mental process. As seen in the last section, the co-occurrence of deictic pointing with PERSON contrast is unnecessary, while it is necessary for DISTANCE contrast. Therefore, in terms of the co-occurrence of pointing gestures, using deictic pointing to designate LOCATION can express DISTANCE contrast rather than PERSON. Furthermore, the shift of the speaker's construal of Hearer from outside the DC to inside the DC causes motivation shift from Hearer profiled to psychological distance, because the speaker cannot distinguish the **Hearer inside the DC** from [**we**] of the DC to profile only the hearer.

Let us summarize the relationship between deictic pointing and other cognitive factors which refer to the hearer's LOCATION as follows:

Table (6.5): The relationship between deictic pointing and other cognitive factors which designate the hearer's LOCATION

	From	To
Deictic pointing	without	with
Construals	Hearer outside the DC	Hearer inside the DC
Motivations	Hearer profiled	psychological distance
Deictic contrasts	PERSON	DISTANCE
Deictic roots	*SO*-series	*KOSOA*

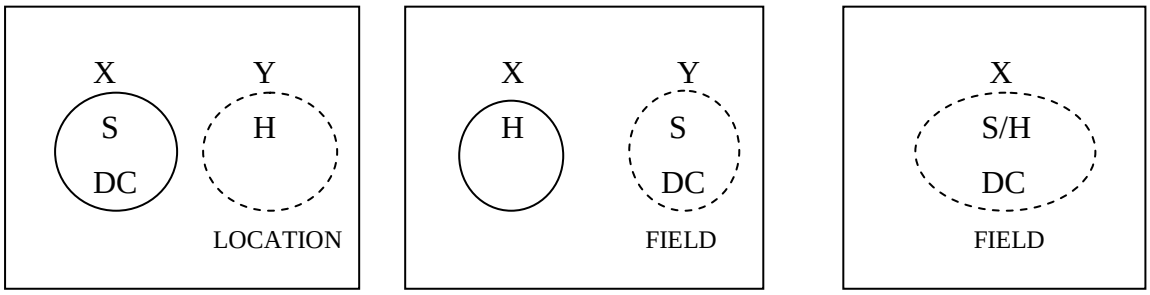
When a speaker construes a given situation as Hearer outside the DC and without deictic pointing to the hearer's LOCATION, s/he is motivated by Hearer profiled and creates PERSON contrast with the *SO*-series. When the construal is shifted to Hearer inside the DC with deictic pointing to a new LOCATION, s/he is motivated by psychological distance and creates DISTANCE contrast with *KOSOA*.

A construal shift from Hearer outside the DC to inside the DC is possible without using deictic pointing as well. The situation is that person X telephones person Y who is hiding in a secret room.

(20) X: Wareware ga **soko** ni iru anata to kakawari o motsu no ga…
we NOM SOko LOC exist you with relation ACC have COMP NOM
'If we have trouble contacting you in there, … '
Y: Yoku wakatteiru. Watashi wa jibunnokatte de **koko** ni iru noda kara.
well understanding I TOP of my free will with KOko LOC exist it is because
'I see, because I am here of my own free will.'
X: **Koko** wa tafuna sekai da.
here TOP tough world COP
'This is a tough world.'
1Q84 book 3 (p 48)

In the first utterance, the speaker X uses *soko* to refer to the room where hearer Y is hiding as LOCATION. In the second utterance, the speaker Y uses *koko* to designate her own room as

FIELD. Although the *–ko* suffix is used for the same spatial referent, LOCATION is schematized from the speaker X's point of view and FIELD is schematized from the speaker Y's point of view. In terms of deictic contrast, the *KO*- and *SO*-series create PERSON contrast between the speaker and the hearer, where the discourse participants X and Y each construe the situation as Hearer outside the DC. However, *koko* of the speaker X in the third utterance indicates a different conceptualization from the two previous demonstratives. Firstly, the speaker X changes his construals of the situation into Hearer inside the DC and, from the perspective of the speaker X as well as the hearer Y, he uses *koko* to designate the living world they belong to as FIELD. Let us represent the conceptual flow about the spatial referent within the discourse as follows:



(i) Speaker X uses *soko*. (ii) Speaker Y uses *koko*. (iii) Speaker X uses *koko*.

Figure (6.21): A construal shift from Hearer outside the DC to inside the DC

In (20), the *–ko* suffix is used three times. The first two uses of spatial demonstratives create PERSON contrast in the construal of Hearer outside the DC, but, the third instance loses PERSON contrast, because the speaker re-construes the situation as Hearer inside the DC. This is a good example which indicates how FIELD is construed in Hearer outside the DC with PERSON contrast and in Hearer inside the DC as zero DISTANCE or no deictic contrast.

This section explores the mental processes behind deictic contrasts and their changes in motivation, from a perceptual (pragmatic) aspect such as ''with or without deictic pointing'' and a conceptual aspect such as a construal shift from Hearer outside the DC to inside the DC.

6.3.4 Summary

Let us summarise the relationship between *KOSOA* and the *–ko* suffix in LOCATION using the semiotic triangle as follows:

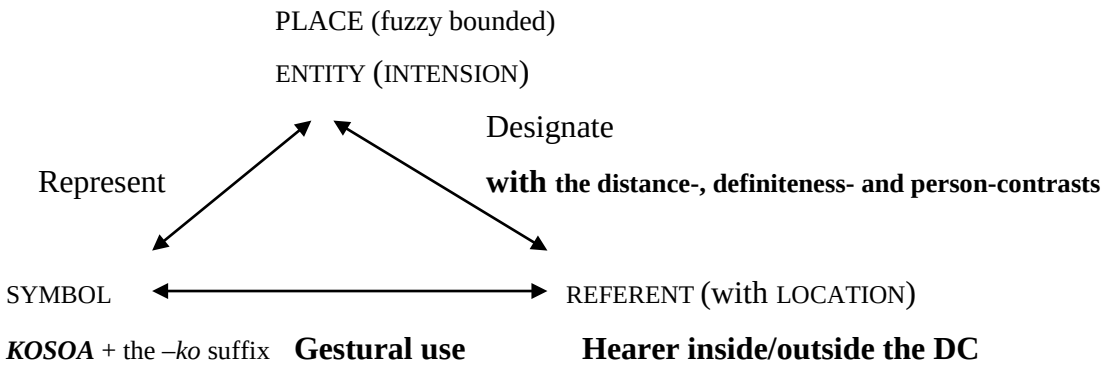


Figure (6.22): The semiotic triangle of *KOSOA* in LOCATION

In comparison with FIELD, LOCATION differs in the following four points highlighted in Figure (6.22): (i) the *–ko* suffix can combine with the *SO*- and *A*-series in addition to the *KO*-series, (ii) there are three relevant deictic contrasts, (iii) LOCATION can be construed either with Hearer outside the DC or inside DC, and (iv) the gestural use of deictic pointing instead of the symbolic use accompanies the verbal expressions.

Finally, from the perspective of using the *SO*-series, I explain the relationship between the deictic contrasts and their motivations, because only the *SO*-series can be employed with all three deictic contrasts (DISTANCE, DEFINITENESS and PERSON).

Table (6.6): Three deictic contrasts and their motivations of the *SO*-series (O stands for the positive value and X for the negative one)

	Psychological distance	Indefinite	Hearer profiled
DISTANCE contrast	O	X	X
DEFI NITENESS contrast	X	O	X
PERSON contrast	X	X	O

Each type of deictic contrast has one distinctive cognitive motivation for the *SO*-series. Rephrased from a ‘‘**negative**’’ point of view, the DEFINITENESS contrast and the PERSON

contrast share the same negative value ‘‘**non-distance**’’ as seen in the column of psychological distance of Table (6.6). S*oko* of the DEFINITENESS contrast expresses an **indefinite** spatial referent, while *soko* of the DISTANCE contrast and the PERSON contrast always has a **definite status** as a referential place. Finally, the DISTANCE contrast and the DEFINITENESS contrast of the *SO*-series make the **hearer non-profiled**. These findings do not appear in the distance-oriented and person-oriented explanations of demonstratives in previous studies.

6.4 PART and *KOSOA*

In this section, we will discuss the relationship between *KOSOA* and the *–ko* suffix in PART. As has been defined in 5.3.8, PART can be inside or on the surface of a bounded entity. It is a fuzzy bounded and relational entity in a set of referents inside bounded entities in the domain SPACE.

A crucial difference distinguishing PART from FIELD and LOCATION is that PART must be denoted in relation to another entity as well as fuzzy bounded. Let us recall the image schema.

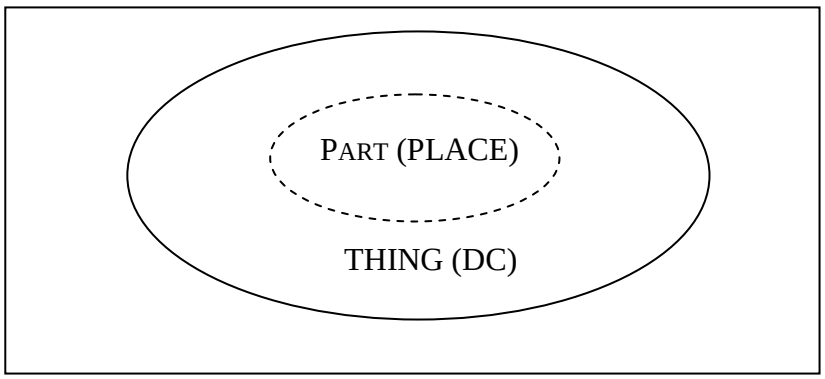


Figure (6.23): The relational entity (PLACE inside THING)

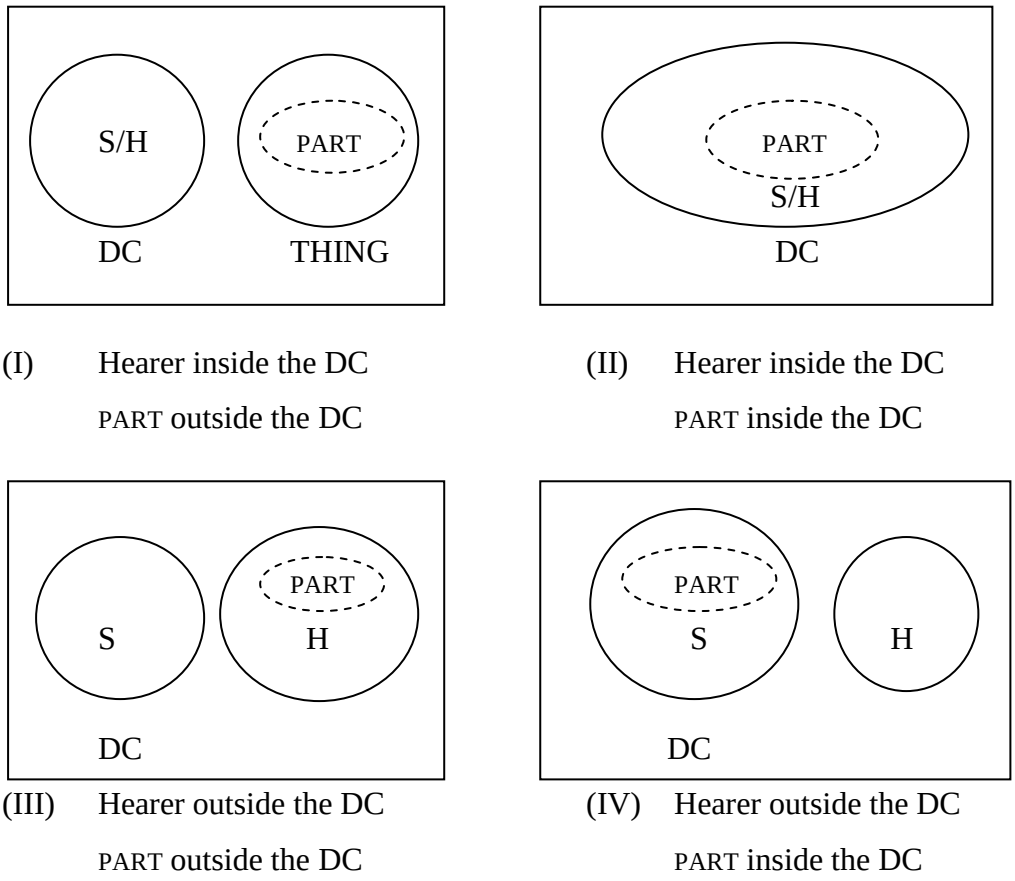
Fuzzy-bounded PLACE of the schematization of PART must be relevant to a bounded entity, THING, which includes the deictic centre. This characteristic of PART creates further distinctions from FIELD and LOCATION in terms of the co-occurrence of deictic pointing and types of deictic contrasts.

Firstly, PART occupies a specific PLACE inside THING. In order to specify which part of THING is denoted as PLACE, the identification demands deictic pointing including contacting a referent, finger-pointing and gazing. Therefore, **deictic pointing as the gestural function is obligatory for PART in a prototypical situation**. Recall that FIELD never occurs with deictic pointing and LOCATION shows various levels of co-occurrence of deictic pointing with deictic contrasts.

Secondly, as a natural consequence of obligatory deictic pointing with PART, every referent in PART must be definite. Therefore, contrary to the *SO*-series of DEFINITENESS contrast in LOCATION, indefinite referents are never designated in PART, which indicates that **there is no DEFINITENESS contrast in PART**.[26]

As a common characteristic of LOCATION in a construal, PART can also be referred to where the Hearer is both inside and outside the DC. However, another crucial difference of PART from both FIELD and LOCATION is the relationship with the deictic centre. PART can be realized both inside ‘‘the deictic centre itself’’ (including a speaker’s contact with THING) and within ‘‘THING outside the deictic centre’’, whereas FIELD cannot be separated from the deictic centre and LOCATION cannot intersect with the deictic centre. Therefore, with the option of the Hearer inside or outside the DC along with PART inside or outside the DC, we need to distinguish four types of construals.

[26] It should be recalled that the absence of DEFINITENESS contrast does not mean the absence of the recognitional use in PART. That is, the *A*-series of the recognitional use is possible in PART, e.g. *asoko ga itai* ‘that part hurts’, but this type of recognitional use has no contrast pair for indefinite referents.



(I) Hearer inside the DC
PART outside the DC

(II) Hearer inside the DC
PART inside the DC

(III) Hearer outside the DC
PART outside the DC

(IV) Hearer outside the DC
PART inside the DC

Figure (6.24): Four types of construals in PART

PART depicted inside the circles of the speaker or the hearer in (II), (III) and (IV) can represent not only body parts of discourse participants but also those parts holding or contacting THING. These types of construals can affect the making of deictic contrasts and their motivations and choosing pairs of *KOSOA*. In the following sections, I will discuss the deictic contrasts of PART with the four types of construals.

6.4.1 Hearer inside the DC and DISTANCE

First of all, let us start with **type (I)** in Figure (6.24), the construal of which is Hearer inside the DC and PART outside the DC. This construal is similar to Hearer inside the DC in LOCATION, so that we can expect the same kind of a motivation (psychological distance) in PART to specify a referent.

Let us examine the following example, in which the speaker and the hearer are in the same room and looking at the same referent on a *shoji* paper screen. The unbounded entity represented by the *–ko* suffix is construed as a spatial referent with *KOSOA* inside the bounded entity (the *shoji* paper screen).

(21) (Discourse participants are talking about the result of the new *shoji* paper screen.)
‘‘Kotchi no hoo wa taira desu ga migi no hashi ga amatte
This GEN direction TOP flat COP but right GEN end NOM excessive-LINK
nami ga dekite imasu ne.’’
wave NOM make-LINK COP SF
‘‘{**koko/soko/asoko**} ga haritate no tokoro de…’’
KOko SOko ASOko NOM have pasted GEN part and
‘‘‘This side is flat but there is too much on the edge of the right side and it is bunching up.’’ ‘‘That part has just been replaced.’’’
CAT

In (21), *asoko* is used in the original text, but, *koko* and *soko* are also possible without changing the positional relationship between the speaker and the spatial referent. The same interchangeability among *KOSOA* occurs in the next example too, where *asoko* is used in the original text.

(22) (Discourse participants are looking at huge objects shaped like dandelions.)

‘‘Funkikoo desu tte. Sore wa nani o suru mono desu ka.
vent COP QUO that TOP what ACC do thing COP Q
Entotsu de wa nai no desu ka ’’
funnel COP TOP not COMP COP Q
‘‘Entotsu de wa nai. Funkikoo toyuu no wa
funnel COP TOP not vent called thing TOP
{**koko/soko/asoko**} kara tsuyoi gasu o fukidasu nodesu. ’’
KOko SOko ASOko from strong gas ACC blow it is
‘‘‘Is it a vent? What is it? Isn’t it a funnel?’’ ‘‘No. A vent blows strong gas from that part.’’’
Uchuu no maigo[27]

In (22), the speaker and the hearer are standing on a large hill and looking down on the same object. All spatial demonstratives can refer to the vent in PART of the *–ko* suffix.

In both examples (21) and (22), a part of the *shoji* paper screen in the first example and the vent of the object in the second one can be expressed by all members of the *KOSOA*-series, which indicates that the deictic contrast is based on DISTANCE. That is, when referents of PART are designated outside the zone of the deictic centre in the construal ‘‘Hearer inside the DC’’, the DISTANCE contrast is motivated by psychological distance.

In the typical situation of Hearer inside the DC, discourse participants look at referents in the same direction and use deictic pointing. Although there is no description of pointing gestures in either of the texts from which (21) and (22) are taken, as mentioned earlier, we can suppose they exist in both examples because it is difficult for the hearer to specify PART of spatial demonstratives without deictic pointing such as finger-pointing or gazing. This is a typical case of DISTANCE contrast of spatial demonstratives in Japanese seen in LOCATION as well. We can modify the image schema for LOCATION as follows:

[27] From *Aozora bunko*. URL: http://www.aozora.gr.jp/cards/000160/card3354.html

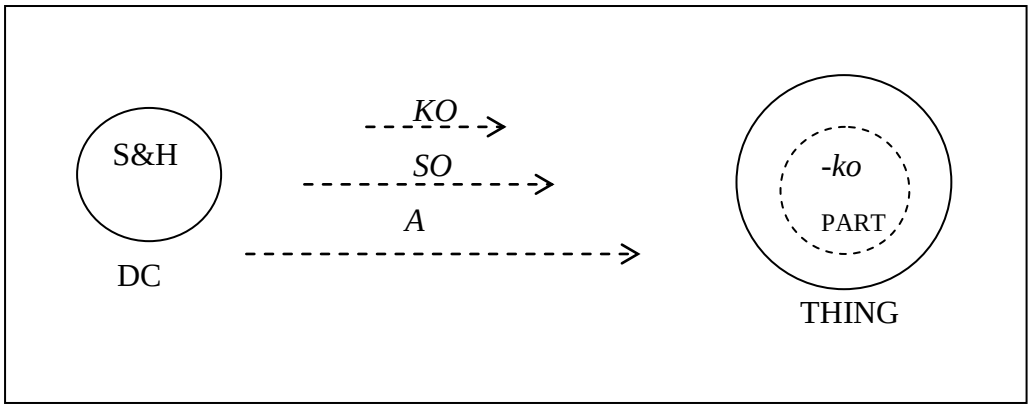


Figure (6.25): PART with DISTANCE contrast

Outside the deictic centre, the *–ko* suffix in PART can combine with all members of *KOSOA*-series with deictic pointing and behave the same as in LOCATION seen in Figure (6.17). The difference between them resides in the types of entities (relational and fuzzy bounded): a PLACE (a fuzzy-bounded entity) is conceptualized inside a THING (a bounded entity) in Figure (6.25).

Next, consider **type (II)** of Figure (6.24), the construal of which is both Hearer and PART inside the DC. Observe the following conversation taken from the Internet,[28] where a mother and her child look at a terrestrial globe together.

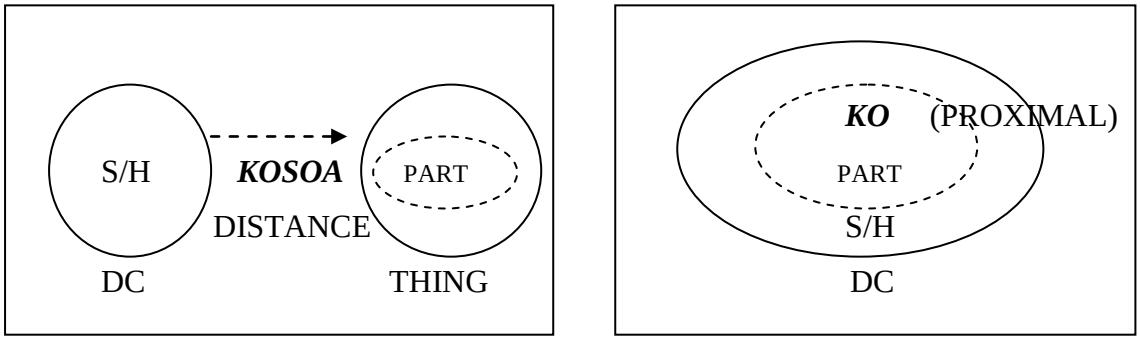
(23) Child: Baba n chi wa doko?
Grandmother GEN house TOP where
'Where is Grandma's house?'
Mother: **Kono** atari da yo. (pointing to Tokyo)
this around COP SF
'Around here.'
Child: Eee, **koko** wa chigau yo.
No KOko TOP wrong SF
'No, not here.'

In a canonical conversation, *soko* in the third utterance of (23) is more appropriate for a speaker to designate the spatial referent being pointed to by a discourse partner, because a

[28] (23) is taken from the Blog *Hidamari nikki* 'Sunny spot diary', URL: http://ameblo.jp/chaahc/theme-10000793826.html

hearer uses the *KO*-series in a previous speech. However, in (23) the speaker (child) and the hearer (mother) hold a terrestrial globe together, a situation which enables the speaker to construe Hearer inside the DC and to use *koko*. Another important cognitive and pragmatic factor for using *koko* would be that the speaker and the hearer are on intimate terms with each other such as in the kinship relationship and among best friends. For example, in (23), when the hearer is his mother, a child may easily construe the situation of Hearer inside the DC, in which case he need not construe his mother as cognitively salient and rather identifies with her to conceptualize referents. Therefore, in this type (II) construal, the use of the *KO*-series is prototypical, where the speaker construes the hearer inside the DC and expresses PROXIMAL to the referential PART.

Let us summarize type (I) and (II) based on the construal of Hearer inside the DC with the DISTANCE contrast.



(I) Hearer inside the DC
PART outside the DC

(II) Hearer inside the DC
PART inside the DC

Figure (6.26): Type (I) and (II) of PART with DISTANCE contrast

We can hypothesize that designating PART of the *–ko* suffix with the construal of Hearer inside the DC is in the DISTANCE contrast. In type (II), only the use of the *KO*-series is motivated by PROXIMAL to the discourse participants.

6.4.2 Hearer outside the DC and PERSON

I shall now discuss types of construals (III) and (IV) in Hearer outside the DC together, because whether PART can be referred to inside or outside the DC is assumed to make PERSON contrast, as expected from the result of LOCATION. Let us examine the following example in two different situations.

(24) Boku ga {**koko** /**soko**} kara furui yume o yomitoru
I NOM KOko SOko from old dream ACC read
'I have to read old dreams from here/there.'
WORLD

Suppose that the referent (an animal skull) in (24) can have two situations: one is in the speaker's hand and the other is in the hearer's hand. If THING is held by the speaker, the *KO*-series is used to designate the referent, but if the hearer holds THING, the *SO*-series is typically used, depicted as follows:

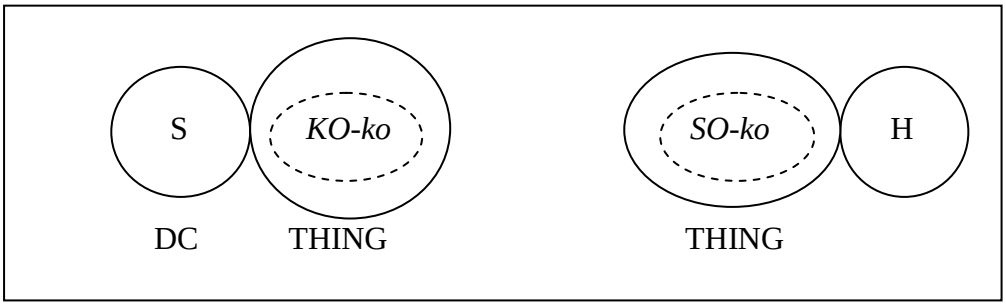
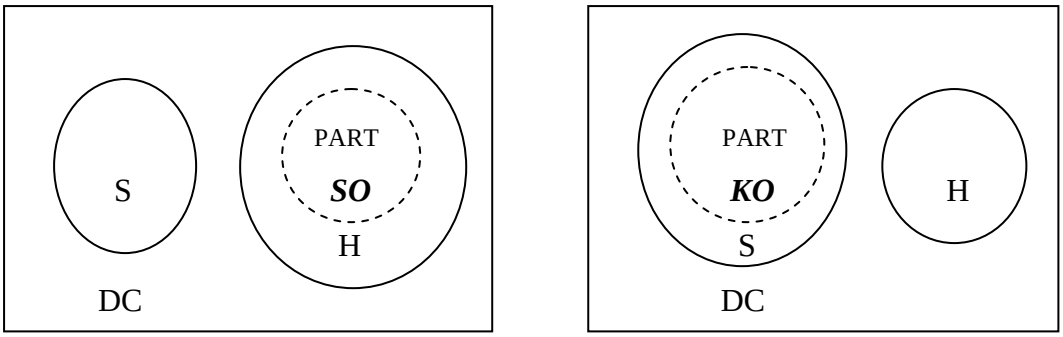


Figure (6.27): PART in Hearer outside the DC

In terms of the deictic contrast, we can classify this as PERSON contrast, because no sense of DISTANCE arises between the deictic centre and the referents, and a semantic contrast is created between the speaker and the hearer marked by a pair of the *KO*-series and the *SO*-series. *KO-ko* of a speaker and *SO-ko* of a hearer cannot be substituted by any other *KOSOA* in the canonical speech situation. I will discuss a non-canonical case in the next section.



(III) Hearer outside the DC
PART outside the DC

(IV) Hearer outside the DC
PART inside the DC

Figure (6.28): Type (III) and (IV) of PART with PERSON contrast

Next, let us discuss how the PERSON contrast of PART is motivated. When PERSON contrast occurs between FIELD and LOCATION, it is important whether or not the speaker profiles the hearer in relation to the DC. However, PART is designated inside THING including the DC, so that the motivation of using the PERSON contrast of PART is different from the motivations between FIELD and LOCATION.

A notion of ‘‘**operability**’’ is relevant for construals of PART, which differs from FIELD and LOCATION. In terms of the psychological relationship between discourse participants and a referent, Endoo (1989) suggests ‘‘operability’’ of referents, which is defined as the possibility that the speaker can clearly denote a referent by means of his/her own body or a support object such as a pointer. Her experiments demonstrated that, when the speaker compares his/her operability of a referent with the hearer’s and judges his/her operability as greater, s/he tends to use the *KO*-series. On the other hand, if the speaker judges the hearer’s operability as greater, the use of the *SO*-series increases.[29]

Endoo suggests that whether ‘‘operability’’ of referents belongs to the speaker or the hearer can affect the choice of *KOSOA*. Based on this suggestion, we can hypothesize that, when speaker’s operability is profiled, the *KO*-series is preferred, while, when Hearer’s operability is profiled, the *SO*-series is preferred.[30] In other words, motivations of PERSON contrast in PART are related to ‘whose operability of a referent is profiled’. This is a crucial

[29] In her experiments, thirty college students were tested in two conditions: in finger-pointing (a control condition), the experimenter asked questions pointing to the referents, and subjects answered using demonstratives; in pointer-pointing condition, the experimenter asked questions using a 120 cm long pointer, enhancing her operability.

[30] Operability can be considered to be a sub-type of deictic pointing, because the speaker always needs deictic pointing to refer to PART but operability is a relevant concept with the construal ‘‘Hearer outside the DC’’.

difference from PERSON contrast between FIELD and LOCATION. Let us compare Table (6.2) showing the PERSON contrast between FIELD and LOCATION with Table (6.7) of PART.

Table (6.2): PERSON contrast between FIELD and LOCATION

Morphological contrast	*KO*-	*SO*-
Semantic contrast	Speaker's FIELD	Hearer's LOCATION
Cognitive motivation	[here] of the DC profiled	Hearer profiled
Types of construal	Hearer inside the DC	Hearer outside the DC

Table (6.7): PERSON contrast in PART

Morphological contrast	*KO*-	*SO*-
Semantic contrast	Speaker's PART	Hearer's PART
Cognitive motivation	Speaker's operability profiled	Hearer's operability profiled
Types of construal	Hearer outside the DC Type (IV) of PART	Hearer outside the DC Type (III) of PART

Morphological aspects are the same, but semantic contrasts, their motivations, and the types of the speaker's construals differ between (6.6) and (6.7). In previous studies, analyses of Japanese demonstratives often end with an argument about whether the demonstrative system is person-oriented or distance-oriented, as explained in footnote 21 (p155). However, scrutinizing the PERSON contrast from a cognitive approach demonstrates that there is a rigorous difference even within the PERSON contrast among FIELD, LOCATION and PART in terms of different types of semantic contrasts with different motivations.

6.4.3 Motivation shift of profiling interlocutors' operability within PERSON contrast from the *KO*-series to the *SO*-series

This section investigates an atypical phenomenon of the PERSON contrast, in which the way of profiling interlocutors' operability is changeable. Firstly, observe the following example.

（25）(The speaker points to her forehead.)

Onna wa mage ni yuuto **koko** ga tsuremasu kara
woman TOP topknot goal tie KOko ACC twitch because
'because women twirl this part in tying a topknot'
CAT

In (25), the speaker normally uses the *KO*-series to designate PART of her own body, because a body-part in the deictic centre is considered to be under the speaker's operability. This is a typical type (IV) construal represented in Figure (6.24).

However, the speaker's operability of his/her body parts can be overridden by the hearer's operability, e.g., when the hearer contacts or points out referents inside the deictic centre. Consider the following example from a novel.[31]

(26) Kare wa musuko no kao o goshigoshi aratta.
he TOP son GEN face ACC scrubbing washed
''Chan, itai yo.''
dad hurt SF
''Nani ga itai nda.''
What NOM hurt it is
''**Soko** itai nda yo.''
SOko hurt it is SF
Shuusaku wa me no shitano kizu o te de osaeyootoshita.
Shuusaku TOP eye GEN under scar ACC hand with tried to press
'He scrubbed his son's face. 'Dad, it hurts.' 'Where?' 'There!' Shuusaku tried to press down a wound under his eye.'
Ikitoshi ikerumono

In this example, a boy named Shuusaku used *soko* to refer to his own body part (a scar under his eye) being washed by his father, because his father touched it. A similar discourse situation appears, for example, when the speaker's tooth is pointed out by a dentist and the

[31] This example is originally used in Sakata (1992:59).

speaker uses the *SO*-series to designate his own body part (a spatial referent inside the DC).[32] Let us depict those phenomena in image schemas as follows:

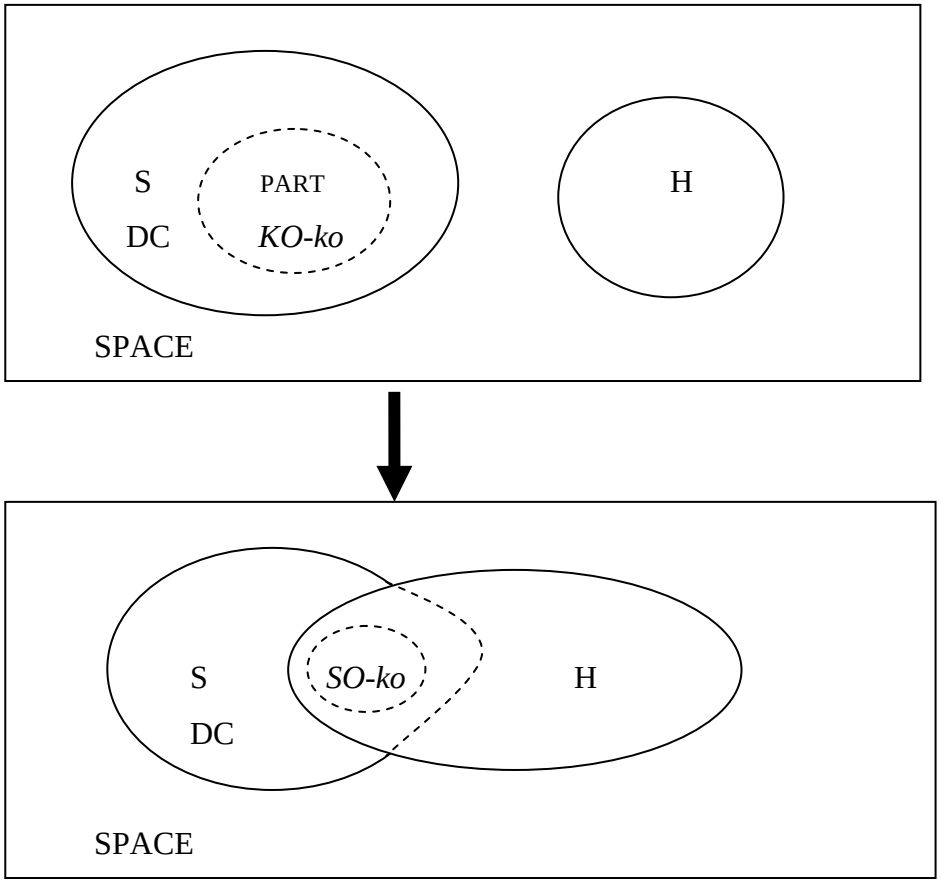


Figure (6.29): A shift within the PERSON contrast from the *KO*-series to the *SO*-series

The first figure represents a typical case in which a referential PART is construed inside the deictic centre and the PERSON contrast is the *KO*-series for referring to the speaker's own body. However, in the second figure, PART is expressed by the *SO*-series with the PERSON contrast because of the hearer's operability, which is drawn by overlapping the hearer's circle with the speaker's one.

We can interpret this as a motivation shift within the PERSON contrast from profiling Speaker's operability to Hearer's operability of a referent, where the marker of the PERSON contrast is also changed from the *KO*-series to the *SO*-series. That is, when the hearer is

[32] The same type of phenomenon is also observed in English, about which Janssen (2002:172) states that, if a doctor is palpating a patient, s/he may utter, ''Is this where it hurts?''; the patient might answer, ''Yes, that is where it hurts''.

construed to be outside the DC, whose operability of a referent is profiled is a key motivation to designate PART even inside the DC.

6.4.4 Motivation shift of the deictic contrasts from Hearer's operability profiled to psychological distance from the *SO*-series to the *KO*-series

We have discussed a motivation shift of deictic contrasts from Hearer profiled to psychological distance to denote LOCATION in 6.3.2.2. The same motivation shift occurs in PART. Let us observe the following example taken from a novel:

(27) (Speaker X sees hearer Y whipping out a gun.)
X: **Ko, Kore**?
KOre
Y: Moderugan
model gun
'What is that?' 'It is a model gun.'
Kamo to Ahiru no Koinrokkaa (p44)

In (27), an item held by a hearer is referred to by the speaker with *kore*. In this example, using the *KO*-series evokes a pragmatic effect, i.e. the speaker's astonishment.[33]

In a similar way, if a speaker is very surprised to see a hearer pointing to a part of an object, s/he can utilize *koko* instead of the canonical use of *soko*. Observe the following

[33] In previous studies, this kind of pragmatic effects is called ''secondary deixis'' (Lyons 1995:310). Lyons exemplifies as follows:

> If speakers are holding something in the hand they will normally use 'this', to refer to it (by virtue of its spatio-temporal proximity). If they say *What's that?* in such circumstances, their use of *that* will be indicative of their dislike or aversion: they will be distancing themselves emotionally or attitudinally from whatever they are referring to.

Lyons (1977:677) suggests the notion of ''emphatic deixis'' with a similar sense to ''secondary deixis'' (see Footnote 23). Concerning the cognitive status of demonstratives, see Prince (1981), Strauss (1993), Chafe (1994), and Gundel et al. (1989, 1993).

example taken from the Internet,[34] where a man is sitting on a bench in the stadium and a woman points to his seat and says to him: [35]

(28) **Koko** wa watashino seki desu kedo.
KOko TOP my seat COP SF
'Excuse me, this is my seat.'

In this situation, as the seat on the bench is occupied by the hearer, *soko* is also substitutable without any context change because of the hearer's operability. However, the speaker expresses *koko* with psychological distance of PROXIMITY. That is, even in the situation where a hearer can manipulate a referential PART, if a speaker does not profile a hearer's operability because of the astonishment of a speaker herself, the *SO*-series in the PERSON contrast can be overridden by the *KO*-series of the DISTANCE contrast with psychological distance instead. We can depict the above non-canonical case as follows:

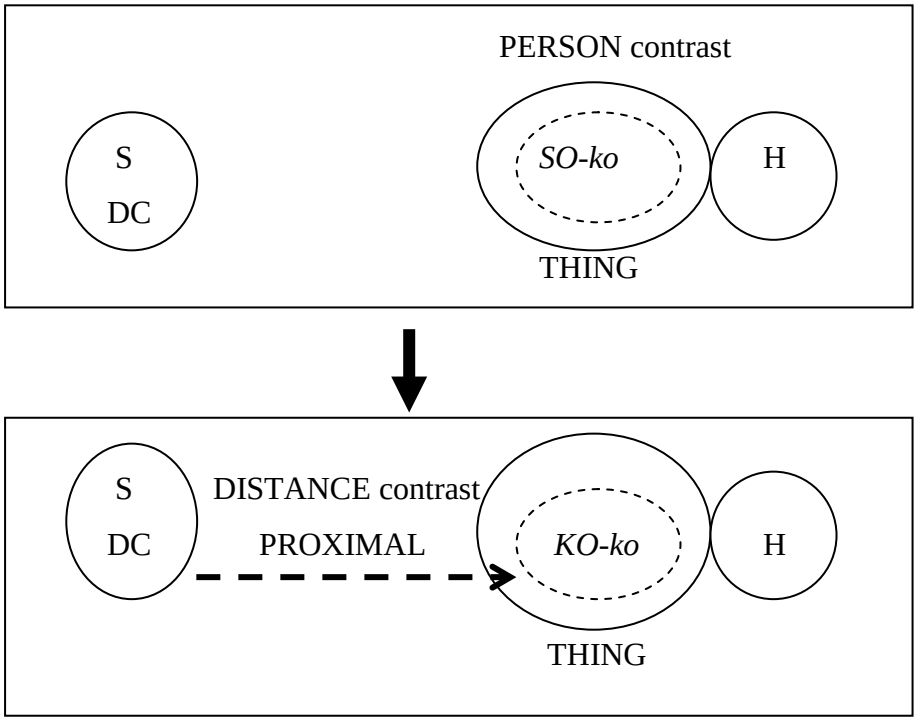


Figure (6.30): A shift of the deictic contrast from the PERSON contrast of to the DISTANCE contrast (from the *SO*-series to the *KO*-series)

[34] (28) is taken from the Blog *Nagagutsu o haita kurinezumi* 'Squirrel with long boots' URL: http://edmundo036.sakura.ne.jp/archives/5377

[35] A seat is conceptualized as PART because of the relationality of two entities, where a seat as PART is construed inside THING such as a chair, a sofa and a bench. I will discuss a cognitive relationship between a seat and THING in terms of construal alternatives by metonymical extensions between the *–ko* suffix and the *–re* suffix in 7.2.5.2.

Figure (6.30) represents that a motivation to designate a referent shifts from a canonical profiling of **Hearer's operability** to the speaker's **psychological distance** by means of expressing the DISTANCE contrast marked by *KO-ko* instead of the PERSON contrast by *SO-ko*.

6.4.5 Summary

Let us make a diagram of *KOSOA* in PART using the semiotic triangle as follows:

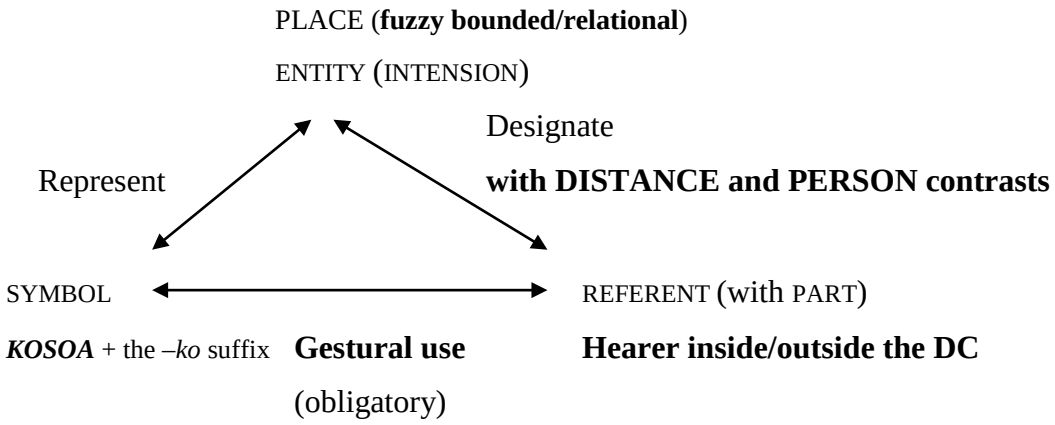


Figure (6.31): The semiotic triangle of *KOSOA* in PART

Compared with Figure (6.22) for LOCATION, differences are seen in the type of entity (from fuzzy bounded to relational and fuzzy bounded), the deictic contrasts (reduced from three types to two), and the gestural use becomes obligatory even for the PERSON contrast.

6.5 Chapter conclusions

Chapter 6 has examined the relationship between extensional properties of the *–ko* suffix and the deictic part *KOSOA* from various cognitive and pragmatic characteristics: (i) how a speaker construes the given situation as either Hearer inside or outside the DC, (ii) what types of deictic contrasts are created by *KOSOA*, (iii) what motivates the deictic contrast, and (iv) the presence or absence of deictic pointing as a part of the meanings of spatial demonstratives.

This chapter has proposed several brand-new perspectives: the combination between *KOSOA* and the *–ko* suffix varies with respect to schematizations of the *–ko* suffix and the types of deictic contrasts. Furthermore, this study proposes that, once a deictic contrast is chosen in a particular situation, it can be altered by various cognitive and pragmatic factors such as using deictic pointing, construal shifts, and motivation shifts.

Previous studies of Japanese demonstratives have concentrated on whether the prototypical use of *KOSOA* is person- or distance-oriented and on how *KOSOA* can help the hearer to identify referents within the categories associated with the qualitative suffixes of demonstratives including the *–re* suffix for [thing] and the *–ko* suffix for [place]. Therefore, analyzing *KOSOA* amounts to analyzing spatial demonstratives.

However, this thesis takes a different approach to that of previous work: starting by defining the intensional property of the *–ko* suffix, we have classified types of extended referents of the *–ko* suffix in terms of the deictic centre in Chapter 5, and discussed cognitive and pragmatic relationships between the schematizations of the *–ko* suffix and *KOSOA* in this chapter. The results re-examine the relationship between *KOSOA* and their deictic contrasts from the speaker's construals and motivations of deictic contrasts in FIELD, LOCATION and PART.

Let us summarise the three schematic patterns of extensional properties of the *–ko* suffix (FIELD, LOCATION and PART) by observing their semiotic triangles. Figure (6.6) illustrating FIELD is modified in terms of the deictic contrast, where the PERSON contrast occurs against LOCATION. Figure (6.22) illustrated LOCATION is also modified in terms of deictic pointing, where deictic pointing is optional in contrast to being obligatory in PART as follows:

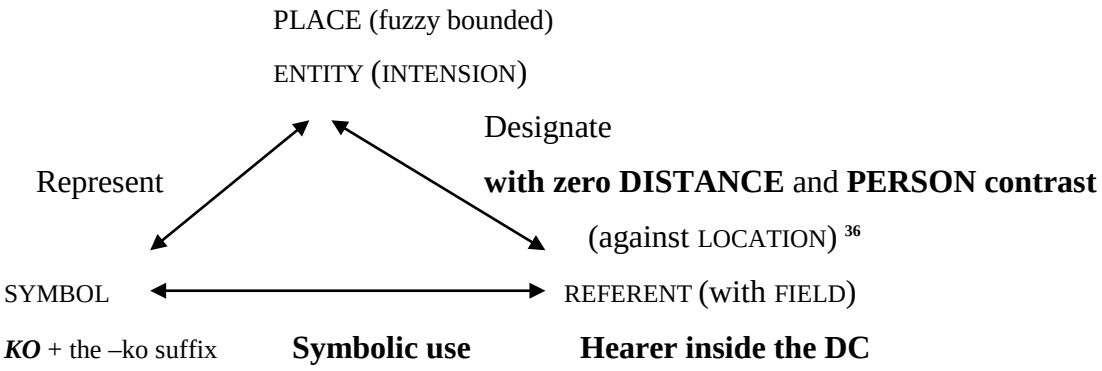


Figure (6.32): The semiotic triangle of *KO* in FIELD

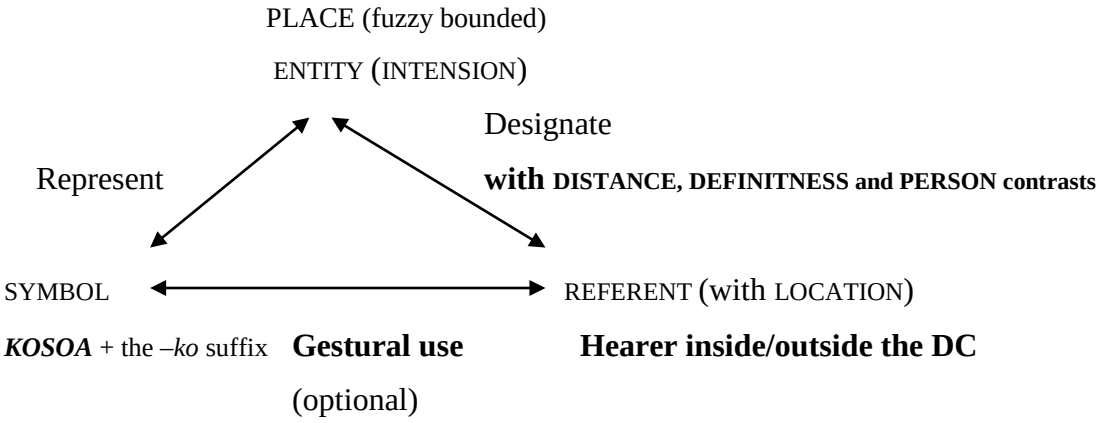


Figure (6.33): The semiotic triangle of *KOSOA* in LOCATION

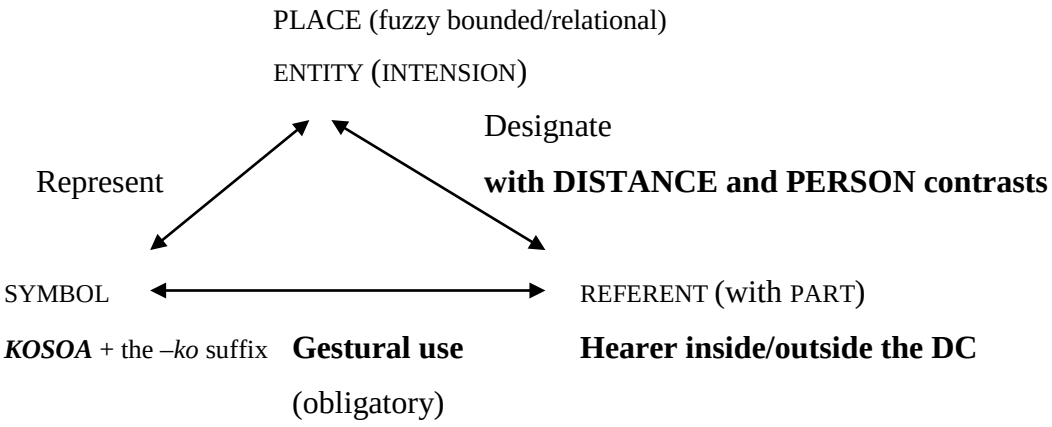


Figure (6.31): The semiotic triangle of *KOSOA* in PART

[36] FIELD cannot create any deictic contrasts inside itself, because of the absence of alternations of the *KOSOA*-series.

The relationship between the three extensional properties, deictic pointing, construals of the hearer, the types of deictic contrast, and the choice of *KOSOA* are summarized in a table below:

Table (6.8): *KOSOA* and extensional properties of the *–ko* suffix

	Deictic pointing	Construal of the Hearer	Deictic contrast	Deictic roots
FIELD	No	inside	PERSON (against LOCATION)	***KO***
LOCATION	necessary	inside	DISTANCE	***KOSOA***
	optional	outside	PERSON	***KO/SO***
	optional	inside	DEFINITENESS	***SO/A***
PART	obligatory	inside	DISTANCE	***KOSOA***
	obligatory	outside	PERSON	***KO/SO***

Among the three extensional properties, FIELD can link only with the *KO*-series. This combinational restriction of FIELD reflects zero DISTANCE, while the interchangeability among all members of *KOSOA* with the *–ko* suffix in LOCATION and PART can be related to the DISTANCE contrast.

We have confirmed that the PERSON contrast occurs morphologically between the *KO*-series and the *SO*-series. However, from a semantic perspective, the PERSON contrast between FIELD and LOCATION is motivated in a different way from the PERSON contrast in PART, the key factors of which are whether hearer is profiled or not, or whose operability of a referent is profiled. The DEFINITENESS contrast between the *SO*-and *A*-series cannot be created except in LOCATION.

In terms of the relationship between the speaker's construals and types of motivations of the deictic contrasts, ''Hearer profiled'' of LOCATION and ''Hearer's operability profiled'' of PART are possible only in Hearer outside the DC and marked with the *SO*-series of

PERSON contrast, while FIELD cannot allow a speaker to profile hearers, because FIELD can be construed only in Hearer inside the DC.

Finally, considering co-occurrences with deictic pointing, only FIELD functions as the symbolic use without deictic pointing, while LOCATION and PART can accompany the gestural use and link between symbols and referents directly. PART always needs deictic pointing, whereas co-occurrence of deictic pointing with LOCATION depends on which deictic contrast is created.

Chapter 7 Two cognitive and pragmatic issues concerning the *–ko* suffix: alternations of the *–re* suffix and temporal expressions of FIELD, LOCATION and PART

7.1 Introduction

This chapter will investigate two cognitive and pragmatic issues relating to the *–ko* suffix: (i) what kind of construals motivate the choice between the *–ko* suffix and the *–re* suffix when they can designate perceptually the same referent, and (ii) what kind of construal motivates the choice of *koko* when it is used as a temporal expression.

These questions are not influenced by the deictic contrasts and alternations of *KOSOA*. Therefore, as in Chapter 5 and to avoid complicating the discussion, the deictic root of spatial demonstratives to be examined will be basically confined to the *KO*-series of *koko*.

7.2 Conceptual contrasts and construal alternatives between the *–ko* suffix and the *–re* suffix

This section will present the differences between the *–ko* suffix and the *–re* suffix from the cognitive perspectives of ‘‘conceptual contrasts’’ and ‘‘construal alternatives’’ based on three extensional properties of the *–ko* suffix (FIELD, LOCATION and PART). I will introduce two types of motivations of construal alternatives: (i) profiling shift based on focus of attention and (ii) metonymical extension.

7.2.1 PLACE and THING

Firstly, I will overview the difference between PLACE and THING in a general sense. It is recognized in previous studies that THING is an individual concept and PLACE is a relational concept, both of which can be subcategorized according to several semantic features: THING may be [person], [animal] or [object] based on individualized ontological assumptions. PLACE assumes [space] that is a continuous, stable three-dimensional container

or [location] that is a relative notion including a located entity and a reference entity (Lyons 1977:442-3 and Frawley 1992:250-4).[1]

However, at the same time, Lyons (1977:475) emphasizes that such semantic differences can be expressed by the same syntactic elements:

> There are many nominal expressions in English which can be understood as referring either to entities or to places according to the context in which they used. For example, 'the church' or 'the house' may refer to a physical entity…the same expressions may also refer to places (or spaces) within which other entities are located.

One reason why the same referent may be either THING or PLACE in a certain environment, is that they share certain properties. Frawley (1992:121) proposes four properties of physical entities, i.e. THING: (i) extendedness including shape and direction, (ii) interiority (contentedness), (iii) size (large or small), and (iv) consistency (flexible or rigid). These characteristics of THING as spatial objects are shared with PLACE as well. Therefore, we can hypothesize that a speaker can conceptualize a single referent in two ways, as either THING or PLACE, without changing the speech contexts. In the following sections, I will examine the difference between PLACE and THING by focusing on the conceptual facets of them.

7.2.2 Conceptual contrast between PLACE and THING

In 5.2.1, I proposed that the *–ko* suffix is used to represent a mental entity when a speaker categorizes this mental entity as PLACE, which denotes the intensional property 'fuzzy bounded'. This section will discuss the ''**conceptual contrast**'', a notion related to the speaker's conceptualization of an entity and how an entity can typically be classified into two types: PLACE and THING (explained in 5.2.5). In the following figure, the broken-line indicates ''fuzzy bounded'' and the solid-line indicates ''bounded''.

[1] In Lyons (1977), the difference between THING and PLACE is given as the difference between 'entity' and 'place'. Frawley (1992) contrasts 'entity' with 'space'. This thesis defines 'entity' in contrast with 'referent' as the general conceptual term in 5.2.1.

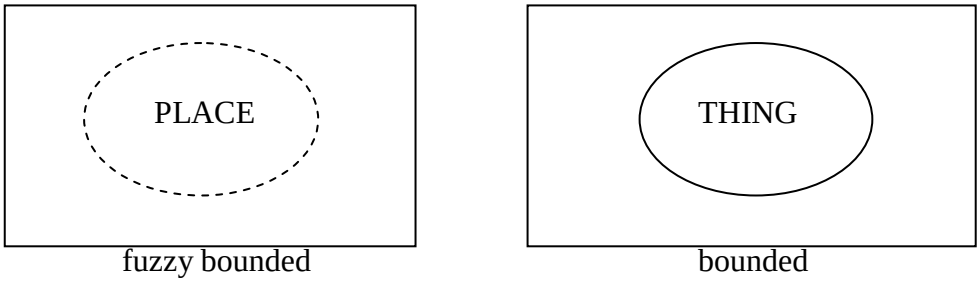


Figure (5.4): PLACE and THING

These representations indicate that PLACE is fuzzily bounded and THING is bounded. They are also considered to be relevant to the semantic distinctions discussed by Lyons (1977) and Frawley (1992) in the previous section, where PLACE is a continuous entity and is relational to another located entity and THING is a discrete and ontologically assumed entity.

Next, let us add morphological information of Japanese demonstratives.

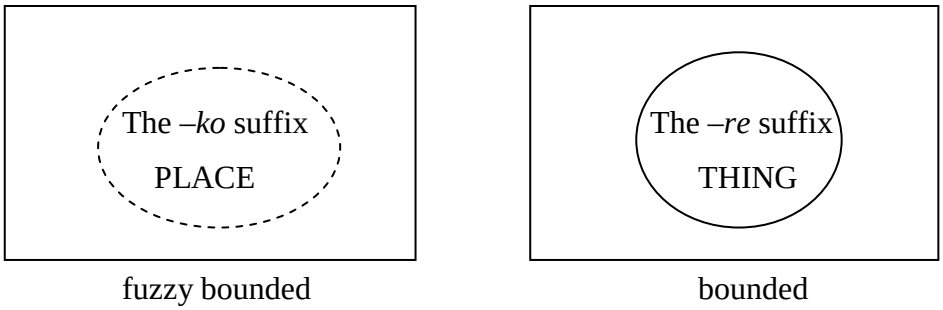


Figure (7.1): Differences of boundedness between the *–ko* suffix and the *–re* suffix

The above distinction of conceptualizing entities is expressed based on the relationship between types of entities and the types of suffixes of Japanese demonstratives, which are either a fuzzy bounded entity and the *–ko* suffix or a bounded entity and the *–re* suffix. This is a conceptual contrast between fuzzy bounded, PLACE and the *–ko* suffix versus bounded, THING, and the *–re* suffix, which is a fundamental distinction in a cognitive semantic analysis of Japanese demonstratives.

7.2.3 Construal alternatives between PLACE and THING

Construal of a referent as PLACE or THING shows a complementary distribution and, in a canonical situation, the *–ko* and *–re* suffixes are not freely interchanged for instance:

(1) (Three people are talking and the speaker points out one particular person.)
Soo yuu hito ga genni **koko** ni iru kara tashikana mono da
so saying person NOM really KOko LOC exist because certain thing COP
'It is certain, because there is such a person here.'
CAT

Koko in (1) cannot be replaced by *kore* in any context in Modern Japanese,[2] where a speaker construes the referential place as a fuzzy bounded entity. Likewise, in a canonical case, the *–re* suffix cannot be substituted with the *–ko* suffix. E.g., when pointing out a pen, we can say:

(2) Kore ga pen desu.
KOre NOM pen COP
'This is a pen'

Koko is never used in the copula sentence for identification such as 'A is B', as in examples like (2).[3] Only the syntactic construction *kore/sore/are ga* THING *desu* 'This/That is THING' is available to refer to an object itself, because it is difficult for the speaker to conceptualize an individual and ontological referent as a fuzzy bounded entity (PLACE) in a typical situation.

Nevertheless, in some limited contexts, the *–re* suffix and the *–ko* suffix can be substituted by each other for perceptually the same referent, where a perceived place is construed as THING or a perceived thing is construed as PLACE. I will call this situation a ''**construal alternative**''. The ''construal alternative'' is a notion related to the speaker's construal of referents, and it asks how the speaker assigns the same referent with different construals. Concerning alternate construals, Langacker (1987:138) writes as follows:

[2] In Classical Japanese, *kore* could be used for a spatial expression such as ''*Kore e maire*'' 'Come here.'
[3] In some pragmatic contexts, *koko* is possible, if the speaker asks the location of a pen.

‘‘Grammatical construction is based on conventional imagery, which reflects our ability to construe a conceived situation in alternative ways. The full conceptual or semantic value of a conceived situation is a function of not only its content but also how we structure this content with respect to such matters as attention, selection, figure/ground organization, viewpoint, and level of schematicity. In regard to all of these, we are capable of making adjustments, thereby transforming one conceptualization into another that is roughly equivalent in terms of content but differs in how this content is construed.’’

Concerning construal alternatives between PLACE and THING, Lyons (1977:475-481, 693) points out several interesting examples in English:

(3) a. This place is cold. [L]
b. It is cold here.

(4) I’ll meet you at the car. [L]

(5) John is with Peter. [L]

In (3), *this place* and *here* can be used to designate the same referent, but the place in (3-a) is referred to as if it were THING (by means of a nominal expression in subject position). In (4), *the car* (typically THING) is used indirectly to identify a place: i.e. the space that is occupied by the car (which can be rephrased by ‘I will meet you at the place where the car is’). The meaning of (5) is that ‘John is where Peter is’, in which PLACE is denoted by an entity that is typically HUMAN (a sub-class of THING). All instances above show variations of construal alternatives, where PLACE is treated as THING and THING is construed as PLACE.

Ikegami (2007:232, 237) also presents several construal alternatives by means of a shift from prototypical PLACE to THING in the following examples, where the same noun phrase occurs in different grammatical constructions both in English and Japanese:

(6) a. He swam across *the channel*. [I]
b. He swam *the channel*.

(7) a. *Daitokai ni* ikiru. [I]
Big city LOC live
‘I live in a big city.’

b. *Daitokai* *o* ikiru. [I]
Big city ACC live
'I live in a big city.'

Although the italicised noun phrases in the above examples would be construed as PLACE in canonical situations, here we can say that they can show conceptual contrasts between PLACE in (a) and THING in (b) respectively.[4] For example, in (6a), 'the channel' functions as a locative complement and is construed as PLACE for the path, whereas 'the channel' in (b) takes the direct object position and is construed as THING which the swimmer challenged himself/herself to do. In the Japanese examples, the same type of contrast appears, with '*daitokai'* 'big city' in (7a) marked with the locative case and construed as PLACE to live in, but, '*daitokai*' in (7b) takes the accusative case and is construed as THING as if it were an object that challenges survival.

The above construal alternatives between PLACE and THING are marked with a difference of grammatical construction. However, I will discuss cases below where the speaker's construal changes between PLACE and THING and motivates morphological substitution without a change in grammatical construction.

In terms of the *–ko* and *–re* suffixes of Japanese demonstrative pronouns, they can be distinguished in two ways: one construal alternative is from prototypical THING (expressed by the *–re* suffix) to PLACE (expressed by the *–ko* suffix) and another is from prototypical PLACE to THING. Construal alternatives can show that a speaker can alternate between two distinctive conceptualisations.

In the following sections, I will examine conceptual differences between the *–ko* and *–re* suffixes when they designate perceptually the same referent with different construals. These differences occur in FIELD, LOCATION and PART respectively.

7.2.4 Construal alternatives between the *–re* suffix and LOCATION

This section will discuss construal alternatives between the *–re* suffix and the *–ko* suffix based on conceptual contrasts between THING and PLACE **in LOCATION**, which designates

[4] In Lyons (1977), the type of expression (a) is defined as a locative expression and (b) as a place-referring expression respectively, e.g. I live in London for (a) and I like London for (b).

radiated zones outside the deictic centre. Let us recall the image schema of the LOCATION presented in Figure (5.25) and repeated below.

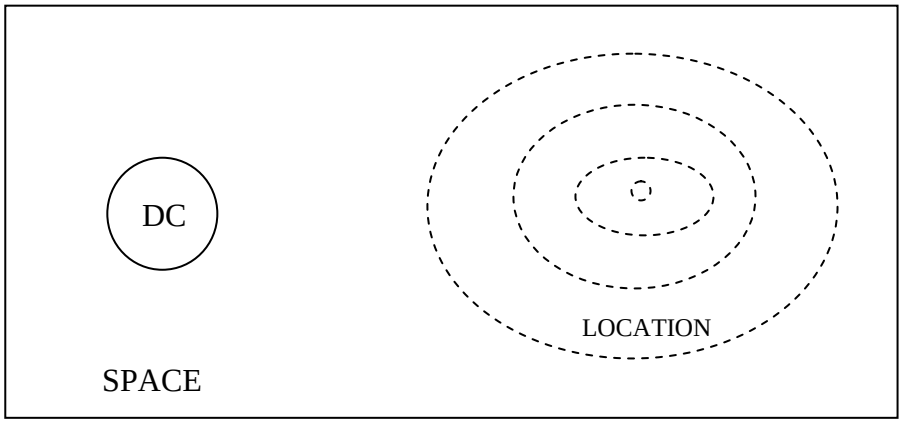


Figure (5.25): The schematic pattern of LOCATION

LOCATION of the *–ko* suffix is construed as outside the deictic centre and never intersects with the deictic centre. Its main cognitive and pragmatic features are (i) to combine with all members of *KOSOA*, (ii) to create three deictic contrasts (DISTANCE, PERSON and DEFINITENESS) and (iii) to enable a speaker to use deictic pointing with various types of deictic contrasts.

Concerning construal alternatives of demonstrative expressions in English, Lyons (1977:474) points out: ‘‘the difference between locative adverbials and place-referring nominals is not clear-cut in all syntactic positions in English. For example, the demonstrative adverbs ‘here’ and ‘there’ and the demonstrative pronouns ‘this’ and ‘that’ are equally appropriate as substitutes for ‘this place’/‘that place’ in an utterance like *This/That place is where we agreed to meet*.’’

Let us observe the following Japanese example, where a speaker uses the *–re* suffix for referring to the village in ***Kore*** *ga sono basho da* ‘This is the place (mentioned before)’.

(8) Nagai kyuuna sakamichi o hanbun bakari kudari ookiku magatte mori
long steep slope ACC half around descend wide curve-LINK woods
o nuketa tokoro de sono sekai wa dashinukeni bokurano me no mae
ACC through place LOC that world TOP suddenly our eye GEN front
ni shutsugensuru…‘‘**Kore** ga sono **basho** da. Kimi wa **koko** ni haitte
LOC appear KOre NOM that place COP you TOP KOko LOC enter-LINK
iku nda’’
go it is
‘After descending halfway down a long slope, curving widely and passing through the woods, that world appears in front of us. ‘‘This is that place. You will enter here.’’ ’
Umibe no Kafuka Vol.2. (p335)

In a canonical interpretation of this example, the referent is a perceived place, so that the *–ko* suffix would be more felicitous than the *–re* suffix. This is supported by the use of the *–ko* suffix in *Kimi wa **koko** ni haitte ikunda* ‘You will enter here’. However, the speaker uses *kore* for the perceived place, reflecting with a construal as THING.

One of the crucial differences between *kore* and *koko* in (8) can be interpreted in the following way: *koko* can be used to construe the entire area of the village including the foot of the mountain as PLACE without consciousness of a clear boundary, while using *kore* seems to designate the village itself excluding the foot of the mountain and to profile the boundary of the village, which encourages the hearer to have a clear-cut image of the place with distinct boundaries. This conceptual distinction between the *–re* and *–ko* suffixes can be considered to reflect the fact that the speaker construes the referent as a bounded entity with *kore* and a fuzzy bounded entity with *koko*.

Let us investigate further examples, where the *–re* suffix can refer to what are generally conceived as spatial referents.[5] Noun phrases with *kore* can take the case particles *o* ‘PATH’ in (9) and *kara* (*yori*) ‘SOURCE’ in (10) (both examples taken from the Internet).[6]

[5] Takahashi and Suzuki (1989) note that there are some cases which express [place] by the *–re* suffix within a limited number of phrases such as *kore made* ‘until here’ and *kore yori* ‘from here’.
[6] (9) is taken from *MSN Soodanbako* ‘MSN advice corner’, URL:
http://soudan1.biglobe.ne.jp/qa2930271.html.
(10) is from *Nishi nihon no tabi* ‘Traveling in West Japan’, URL:
http://www.geocities.jp/syokuninnokai/nisinihon.html.

(9) **Kore** o tooru to Kikuchi onsen kara Aso… ni deru.
KOre PATH pass COM Kikuchi hot spring from ASO LOC go
'When one passes through here, one arrives at Aso… from Kikuchi Onsen.'

(10) **Kore** kara saki e wa susumemasen.
KOre SOURCE ahead to TOP cannot go
'You cannot go any further from here.'

Kore in both examples can be replaced with *koko* without changing the referents and the pragmatic context. In a canonical situation, *koko* can be considered as a more suitable expression because both referents are spatial.

However, as seen in (8), when the speaker construes the referent as a bounded entity, using the *–re* suffix is preferable to a prototypical use of the *–ko* suffix for a spatial referent. For instance, if *koko* is used in (9), the speaker construes the road as a long and continuous referent based on a fuzzy bounded conceptualization of an entity, whereas using *kore* interprets the road as a bounded route from a departure point to a goal. In (10), *koko* would be used to refer to a particular area of a road, from which the speaker cannot move forward, while using *kore* loses the relational character which exists between PLACE and a located entity and construes the referent as THING as if it were a barrier or an obstacle to going further.

The difference between the two construals is whether the speaker profiles a referent as PLACE expressed by the *–ko* suffix or THING by the *–re* suffix. In the examples above, the construal alternatives are based on a perceived place construed as THING, which can be interpreted as **a profiling shift from prototypical PLACE to THING.**

In considering why the profiling shift occurs, the notion ''focus of attention'' is important. Langacker (1987:115) remarks:

> The reality and importance of attention as a mental phenomenon are beyond dispute...it shifts quite readily from one domain to another and from one entity to another within a domain...it leads itself, on introspective grounds, to characterization in terms of a central or focal area fading off into a periphery of indefinite extension (thus we speak of the centre or focus of attention).

Using Langacker's concept of ''focus of attention'', I hypothesize that such shifting of construals reflects a movement from one ''focus of attention'' to another. For example, the construal shifts in examples (8), (9) and (10) occur due to the ''focus of attention'' which changes from a fuzzy bounded entity of PLACE to a bounded entity of THING. In such a situation, relationality as well as the fuzzy boundary of LOCATION fades, yielding the construal of THING.

In order to explain how different types of construal can occur by using the *–ko* suffix and the *–re* suffix for the same referent, I will use the Mental Space Model (presented in 4.5 and 6.3.1.2) again, as it is helpful to demonstrate how two different construals are possible in one referent. In the following picture, referent X is conceptualized in the speaker's Reality Space and mapped as two different construals 1 and 2, where double-headed arrows between the spaces demonstrates the link between a referent and its various concepts in the speaker's mind.

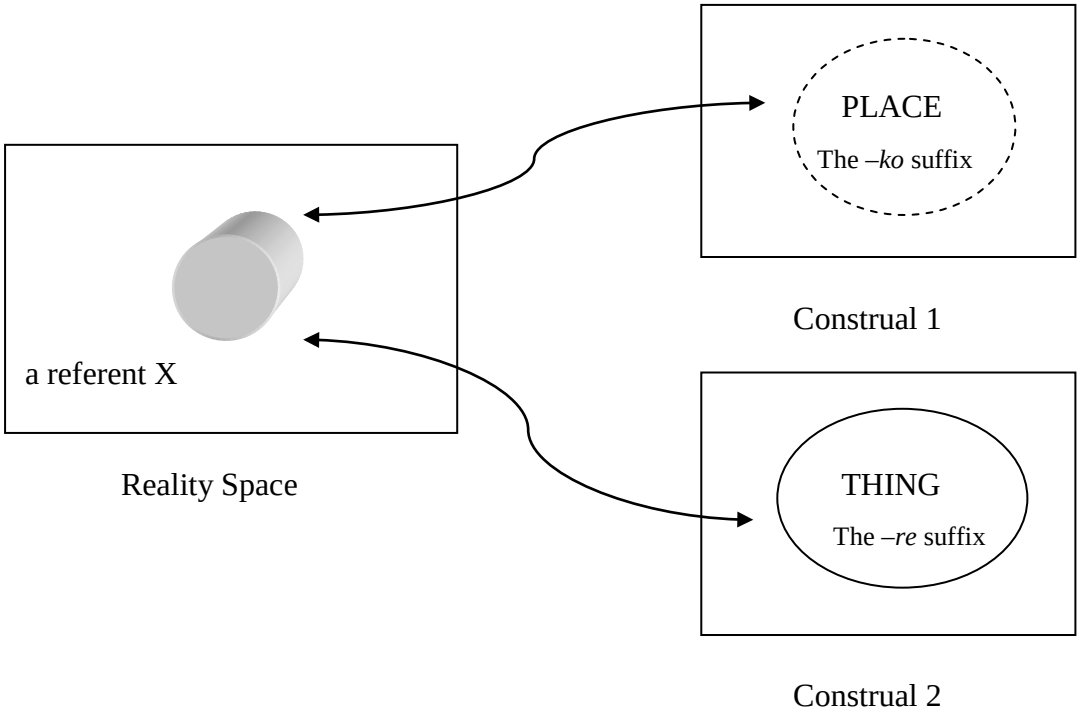


Figure (7.2): Two different construals with the *–ko* and *–re* suffixes

Figure (7.2) shows that a referent X in Reality Space can correspond to two different concepts: one is PLACE represented by the *–ko* suffix and another is THING represented by the *–re* suffix, and these are mapped as the two different construals. That is, the alternation between the *–ko* and *–re* suffixes expresses the same referent in the same pragmatic context,

but represents it as different types of entities based on different construals in different Mental Spaces.

7.2.5 Construal alternatives between the *–re* suffix and PART

Here, we will discuss construal alternatives between the *–re* suffix and PART, which is typically associated with the *–ko* suffix. Let us reconfirm the image schema of PART presented in Figure (6.23).

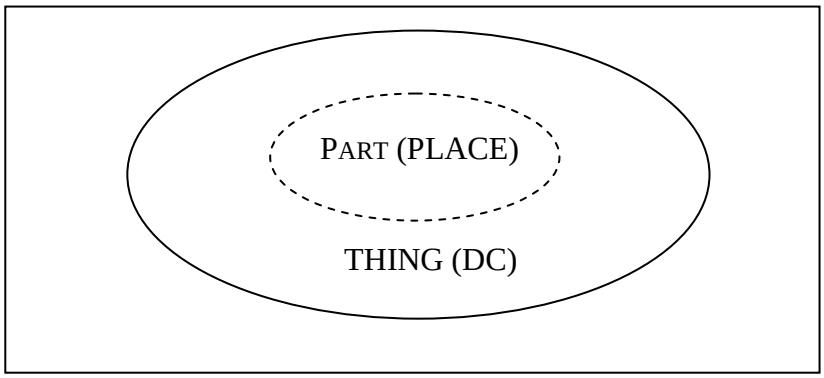


Figure (6.23): The relational entity (PLACE inside THING)

PART is schematized as a fuzzy bounded and relational entity, which is conceptualized as PLACE inside THING. These characteristics can lead to two types of construal alternatives: (i) from prototypical PART to THING by a profiling shift, and (ii) from prototypical THING to PART by metonymical extension.

7.2.5.1 Profiling shift from prototypical PART to THING

‘‘Part’’ possesses the two properties of entity and place simultaneously, and as Lyons (1977:696) describes: ‘‘the English word ‘part’ can be used in expressions which refer either to entities (to a physically or conceptually detachable portion of a large entity) or to places (to spaces enclosed by the extremities or boundaries of an entity or of its part).’’

Based on the above remarks, we can expect that a profiling shift from prototypical PART to THING would occur parallel to that of prototypical PLACE to THING in LOCATION. Suppose that a speaker points out a button on a machine and says,

(11) {Koko/Kore} o oshite kudasai
KOko KOre ACC press-LINK please
'Please press here/this.'

In the context of (11), the speaker would typically use *koko* in order to designate PART, because no type of button or switch can be independent from the machine or operation board. However, when the button of the machine is bigger than usual or figuratively unique, using *kore* is more favoured than using *koko*, because the button itself is more cognitively salient than its being part of the machine. In some contexts, both demonstratives *kore* and *koko* are equally appropriate and which is selected depends on the individual speaker's construal.

The significant point here is that the speaker can refer to exactly the same referent by both the *–ko* and *–re* suffixes, but with different construals. Let us represent the two construal alternatives with Mental Spaces.

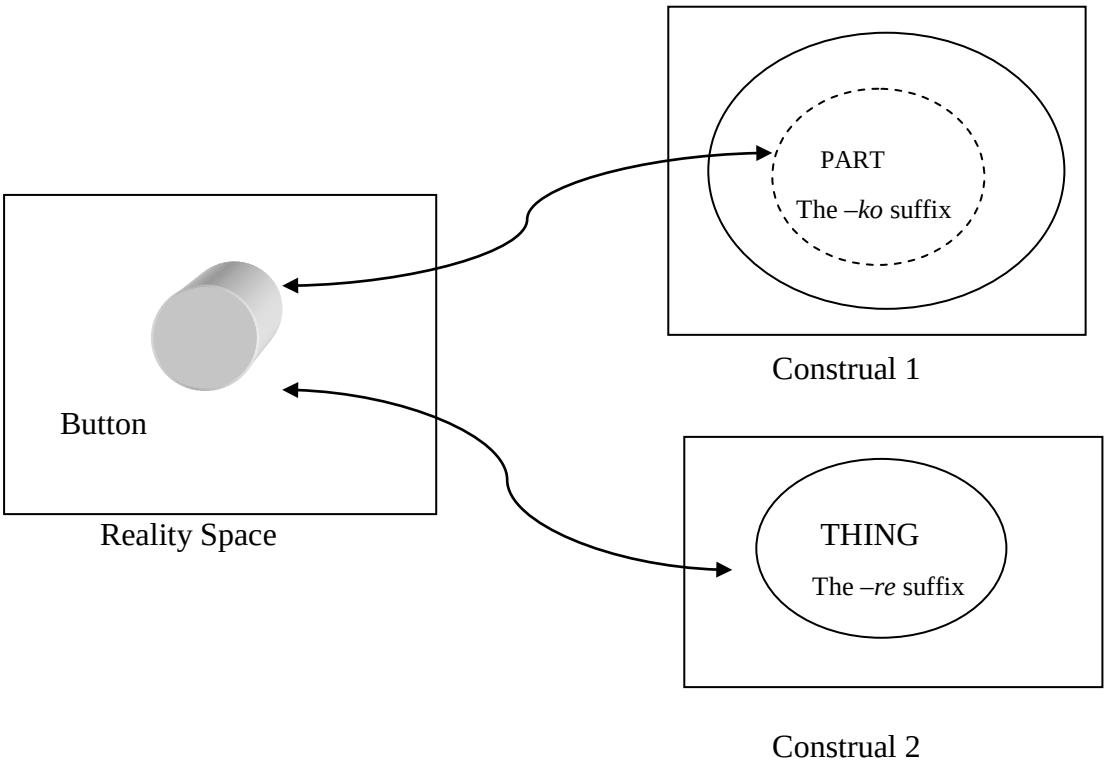


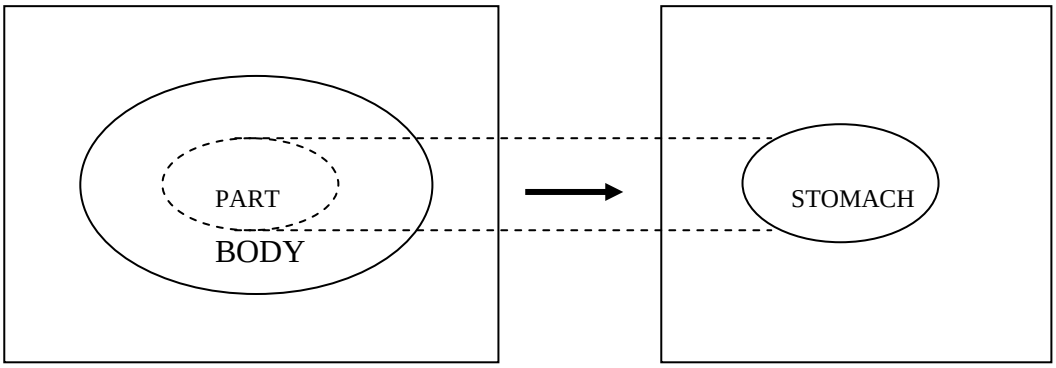
Figure (7.3): Two construal alternatives with the *–ko* and *–re* suffixes

As seen in Figure (7.3), even though the same referent 'button' is designated, a speaker can have construal alternatives, the conceptualization of which is either a relational fuzzy bounded entity or a bounded entity and is encoded by a choice of the *–ko* suffix or *–re* suffix respectively. The PART reading with the *–ko* suffix is established with relation to another entity (machine), while the *–re* suffix in this context disregards the other entity within the domain and simply profiles the button itself as THING.

The next example clearly demonstrates the construal alternatives by means of profiling shift from PART to THING between the discourse participants.

(12) X: Kin san doomo **koko** ga itande ikenee nan daroo
Kin Mr. somehow KOko NOM hurt-LINK be not good what guess
'Mr. Kin, it seems to be hurting here somehow and it's not good, what do you think?'
Y: **Sore** wa i sa.
SOre TOP stomach SF
'That is your stomach.'
CAT

The discourse participant X refers to his body part using the *–ko* suffix of *koko*, which is construed as PART, while Y refers to the same referent designated by X using the *–re* suffix of *sore*, which is construed as THING. In the first utterance, X cannot specify the name of his body part and asks Y about which part of the body it is. The unidentified nature of the referent could cause X to categorize the entity as relational and fuzzy bounded. On the other hand, Y in the second utterance recognizes that body part as the stomach: Y conceptualizes the referent as bounded motivated by an ontological assumption of THING. Let us depict the profiling shift between two discourse participants.



The *–ko* suffix The *–re* suffix

Figure (7.4): Profiling shift from PART to THING in the flow of discourse

Figure (7.4) shows the flow of discourse, where one referent can be construed in two different ways. Two broken lines between PART and STOMACH represent their identification as the same referent. It can be hypothesized that a profiling shift from PART to THING can remove the relationality between BODY and PART from the entity and change the ‘‘focus of attention’’ from the fuzzy bounded to the bounded. Therefore, the choice of *–ko* suffix or *–re* suffix depends on which facets of a referent are profiled in a speaker’s construal.

7.2.5.2 Metonymical extensions from prototypical THING to PART

We will now discuss another type of construal alternative, which works in the opposite way, i.e. from prototypical THING to PART. We will call this a **metonymical extension**.[7] Since Lakoff and Johnson (2003) proposed the idea of ‘‘conceptual metaphors’’, the importance of metaphor and metonymy in linguistic expressions has come under focus, especially in the cognitive approach. Lakoff and Johnson (2003:36) explain, ‘‘metaphor is principally a way of conceiving of one thing in terms of another, and its primary function is understanding. Metonymy, on the other hand, has primarily a referential function, that is, it allows us to use

[7] I will use the term ‘‘metonymy’’ as a broad notion including subclasses such as ‘‘synecdoche’’ for the part-whole relation and ‘‘meronymy’’ for the individual-class relation. See Croft and Cruse (2004).

one entity to stand for another.''[8] In other words, metonymy is motivated by the contiguity between entities and metaphor by the similarity between them.

Lakoff and Johnson (2003:38) propose several metonymic concepts, which are different from ''metonymic expressions'': metonymic concepts are abstractions from metonymic expressions.[9] Among various metonymic concepts, one of the concepts most relevant for this section is THE PART FOR THE WHOLE in the following examples (taken from Lakoff and Johnson (2003:36)):

(13) There are a lot of *good heads* in the university. [L&J]

(14) I've got a new *set of wheels* [L&J]

The italicised expressions in (13) and (14) are metonymical extensions, where *good heads* is used to refer to ''intelligent people'' and *set of wheels* for ''car, motorcycle etc.''.

On the other hand, Taylor (2003:126) gives the contrasting examples in (15) and (16) to illustrate a metonymical extension that can be labelled THE WHOLE FOR THE PART:

(15) Wash the *car*. [T]

(16) Vacuum-clean the *car*. [T]

[8] Concerning the relationship between metaphor/metonymy and domains, see Croft (1993), Barcelona (2000) and Dervin (2002). Taylor (2003:126) remarks that metonymy turns out to be one of the most fundamental processes of meaning extension, more basic, perhaps, even than metaphor.

[9] Concerning other metonymic concepts, several representatives are illustrated as follows:

(i) The *kettle* is boiling. (Taylor 2003)
(ii) *Washington* is insensitive to the needs of the people. (Lakoff and Johnson 2003)
(iii) He bought *a Ford*. (Lakoff and Johnson 2003)

The italicised expressions in the above examples represent CONTAINER FOR CONTAINED, THE PLACE FOR THE INSTITUTION, and PRODUCER FOR PRODUCT, respectively.

In 3.3.2, we have seen that Takahashi and Suzuki (1989) proposes [group] as a semantic feature of the *–ko* suffix with the following example,

(iv) (Inside a motor company)
X: Watashi wa **koko** no sekininsha da. [T and S]
I TOP KOKO GEN manager COP
'I am the manager here.'

However, this example can be interpreted as a metonymical extension (THE PLACE FOR THE INSTITUTION), where *koko* stands for the speaker's company. Therefore, we need not establish the semantic category [group] for the *–ko* suffix.

In both examples, *car* does not refer to all the parts of the car. Instead, *car* in (15) is used to refer to its exterior and in (16) its upholstered interior. Taylor (2003:126) gives the following explanation for why a metonymical concept ‘‘THE WHOLE FOR THE PART’’ is used:

> In fact, if the above examples were to be rephrased so as to express exactly and precisely what a speaker intended, the results would be intolerably wordy…the named entity (in the above cases, the car) functions as a cognitively salient and easily identified reference point….

In general, THE WHOLE FOR THE PART is a major metonymical concept used in the construal alternatives of PART in Japanese demonstratives.[10] Observe the following example.

(17) (The speaker is holding an animal skull.)

Boku	ga	**koko**	kara	furui	yume	o	yomitoru	to	yuu	koto	wa
I	NOM	KOko	from	old	dream	ACC	read	QUO	say	COMP	TOP
wakatta	yo										
understood	SF										

‘I understand that I have to read old dreams from here.’

WORLD

In (17), *koko* refers to the inner part of the object (animal skull). Although the interior of an object is not perceivable from outside in (17), the *–ko* suffix as PART can be used to construe the interior of the referent as a fuzzy bounded and relational entity.

In the same context, the *–re* suffix can also be used to designate the same interior part of the object as the *–ko* suffix. For instance, both expressions, *koko kara* and *kore kara* in (17) can be rephrased as *kono naka kara* ‘the inside of this’. The question of how the *–re* suffix can refer to the interior of the skull (fuzzy bounded), when speakers use the *–re* suffix for conceptualizing a referent as a bounded entity needs to be resolved.

One possible interpretation is a metonymical extension of a referent expressed by the *–re* suffix. As described above as the concept THE WHOLE FOR THE PART, in order to designate a non-perceptible referent (the interior), the speaker in (17) uses a perceptible

[10] Concerning studies of metonymy in Japanese expressions, see Satoo (1992) and Seto (1995)

figure (an animal skull) to refer to it. In other words, the speaker uses a strategy in which a cognitively more salient item is substituted for a less salient one.

Figure (7.5) below represents that the *–ko* suffix connects with a fuzzy bounded and relational entity (INTERIOR as PART) directly. On the other hand, the *–re* suffix firstly links with a bounded entity (represented by a solid-lined arrow) and next extends to a fuzzy bounded entity based on the metonymical concept THE WHOLE FOR THE PART (a broken-lined arrow). Thus, *kore* denotes INTERIOR indirectly.[11]

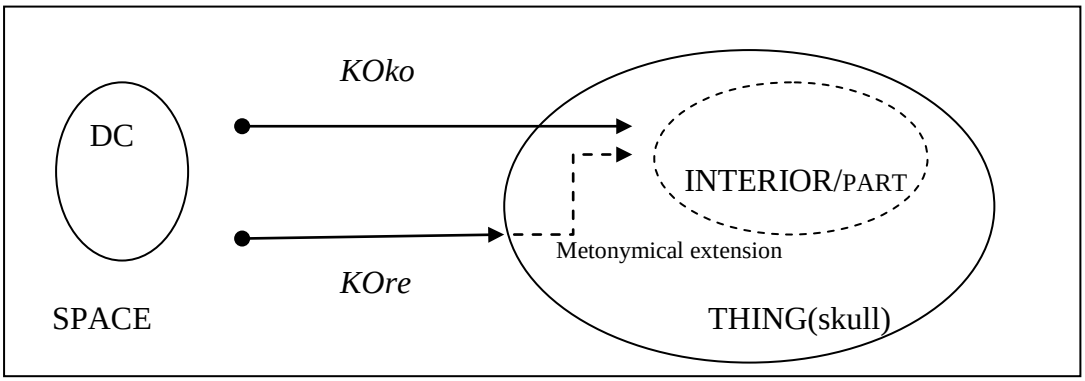


Figure (7.5): Metonymical extensions of the *–re* suffix for PART

In the construal alternatives with profiling shift, seen in (7.6), the *–ko* and *–re* suffixes profile different facets of one referent. However, in the construal alternatives with metonymical extensions, both suffixes can denote the same facet (the interior part) with different conceptualization routes: the *–ko* suffix can be linked with the interior directly and the *–re* suffix can be linked with the interior by extension from its direct link to the bounded entity (an animal skull).

The following example is also a metonymical extension of construal alternatives between the *–ko* and *–re* suffixes.

(18) **Kore** ni suwatte kudasai.
KOre LOC sit-LINK please
'Please sit on this.'

[11] Concerning a model of representing metonymical extensions, see Reference Point Model and Active Zone analysis in Langacker (1991, 1999). Yamanashi (2000, 2004) applies the Reference Point Model to the analysis of anaphoric phenomena in Japanese.

(19) **Koko** ni suwatte kudasai.
KOko LOC sit-LINK please
'Please sit here.'

In order to designate the spatial referent on which a person should sit, the speaker can denote the same facet of a referent by using both the *–re* and *–ko* suffixes, where PART expressed by *koko* would be construed as the seat of the chair directly, while THING expressed by *kore* extends indirectly to a seat from the chair as an object through the metonymical concept THE WHOLE FOR THE PART.[12] The motivation for using the metonymical extension is to express a cognitively more salient figure (the WHOLE) as a reference point to a less salient part.

It should be noted that whether the speaker chooses to use the *–re* suffix for a generally spatially conceived referent with a metonymical extension is **a matter of degree of the speaker's construal**, which depends on whether the WHOLE can function as a more cognitively salient reference point than the PART. For example, when there is no chair and the speaker points out a large box, both expressions *kore/koko ni suwatte kudasai* 'Please sit on this/here' would be equally available, in which case *kore* directly refers to the box but indirectly designates the top of the box with the metonymical concept THE WHOLE FOR THE PART. However, when the speaker points out a particular spot on a long sofa or bench, using *koko ni suwatte kudasai* 'Please sit on this' would be more appropriate than using *kore*, since it is easier for the speaker to construe that a particular spot on a sofa or bench as the PART) is more cognitively salient than a long sofa or bench itself (the WHOLE) because of its large size.

Finally, I will illustrate construal alternatives between the *–ko* suffix and the *–re* suffix with or without metonymical extensions by observing several examples that designate similar situations, where the speaker introduces his/her home. As Lyons (1977) and Frawley (1992) point out, a building or room can be conceptualized in both ways as a physical entity and as a spatial entity.

[12] We have to carefully distinguish the difference between construal alternatives (created by qualitative suffixes *–ko* and *–re*) and construal/motivation shifts of the deictic contrasts seen in Chapter 6 (created by the deictic root *KOSOA*).

Firstly, let us compare the following two examples, where both speakers mention their homes without metonymical extensions.[13]

(20) Chinamini **kore** ga uchi desu. Chitchai desu.
by the way KOre NOM home COP small COP
'By the way, this is my home. It is small.'

(21) **Koko** ga watashino uchi desu. Tottemo hirokute…
KOko NOM my home COP very spacious-LINK
'This is my home. It is very spacious…'

In both (20) and (21), *kore* and *koko* are interchangeable, referring to the speaker's home, but the choice of suffix profiles different facets of the referent without metonymical extensions. In using *koko*, when the speaker is inside his home or the building, the *–ko* suffix is **FIELD**, and when the speaker is outside, the *–ko* suffix is **LOCATION**.[14] *Koko* in both examples does not designate **PART**.

Typically, the speaker tends to construe a perceptually discrete item as a bounded entity, and an item continuous to the environment as fuzzy bounded. This tendency is reflected in the original utterance by the different adjective: *chitchai* 'small' with *kore* in (20) and *hiroi* 'spacious' with *koko* in (21). Kushima (2001) points out that the pair of adjectives *ookii* 'big/large' and *chiisai* 'small/little' are typically accompanied by THING and the pair *hiroi* 'large/wide/spacious' and *semai* 'small/narrow' by PLACE.[15] Thus, although *kore* and *koko* are interchangeable for the same referent in (20) and (21), they profile a different facet of the referent, where the *–ko* suffix is used for 'fuzzy bounded' and the *–re* suffix for 'bounded'.

Secondly, let us examine the case of using metonymical extension with the *–re* suffix, where the *–re* suffix and the *–ko* suffix can designate the same facet of a referent with

[13] (20) is from HP *Mari papa* 'Mari's papa', URL: http://photozou.jp/photo/show/64123/2305171.
(21) is from HP *Wani no heya bekkan* 'An annex to Wani's room', URL: http://shirowani.fc2web.com/bekkann/gift/gajimusama2-2.htm.

[14] It should be noted that the use of *koko* is not for the selection of a particular LOCATION among other locations. This type of interpretation for the qualitative suffixes of demonstratives is often presented in previous studies, but this is too much influenced by the meaning of *KOSOA*, which is based on deictic contrast. In this section I focuses on the **conceptual contrast** between the qualitative categories PLACE and THING which is not relevant to the choice of a particular referent among others with a **deictic contrast**.

[15] Concerning translation gaps between Japanese and English, Kojima (1988:205) mentions that the Japanese adjective *hiroi* has two semantic divisions in English: [wide] for a wide river and [large] for a large room, in addition to [spacious].

different routes of conceptualization. The following examples illustrate that *kore* and *koko* can refer to the same type of spatial referent, which is one room of a building.[16]

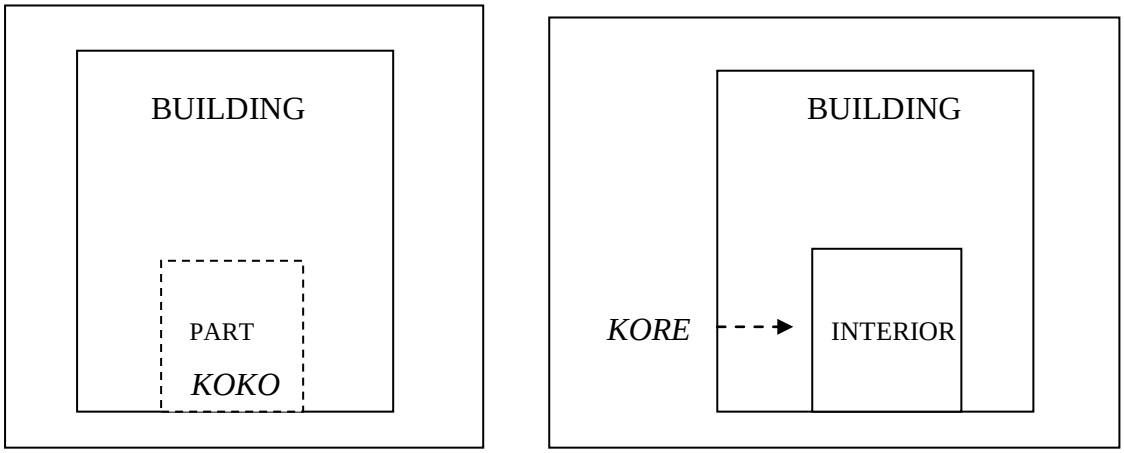
(22) {**Kore/Koko}** ga uchi desu…Ore wa kono apaato no isshitsu o kariteiru…
KOre KOko NOM home COP I TOP this apartment GEN a room ACC renting
'This is my home… I rent a room in this apartment.'

(23) (Pointing out a seven-storey condominium)
{**Koko/Kore}** ga watashino uchi desu.
KOko KOre NOM my home COP
'This is my home.'

Although *kore* in (22) and *koko* in (23) are used in the original data, the *–re* suffix and the *–ko* suffix are interchangeable without any change in referent, the room in a building where the speaker lives. When the speaker stands **in front of his room**, the difference between the *–re* suffix and the *–ko* suffix is a matter of which facet of a referent is profiled, as seen in (20) and (21). That is, it is the difference between construal as LOCATION (PLACE) and THING.

However, when *kore* and *koko* are used to refer to his room **from outside the building**, they are different from the case where the speaker is standing in front of his room. The difference between the two expressions is that the *–ko* suffix can directly refer to a room as PART (PLACE), while the *–re* suffix indirectly designates a room with a metonymical extension from a building as a reference point. In other words, although both suffixes are used for conceptualizing the interior of a building, *koko* designates it directly, whereas *kore* designates it indirectly with the metonymical concept THE WHOLE FOR THE PART. I will represent two different construal alternatives as follows (the arrow from THING to INTERIOR in Figure (7.6) stands for a metonymical extension). Figure (7.6) shows how *koko* and *kore* denote the same concept (INTERIOR/PART) with two different construals using a metonymical extension.

[16] (22) is taken from the Blog *Kiyopace*, URL : http://ameblo.jp/kiyopace/entry-10614088422.html
(23) is from the Blog *Letter from home*, URL: http://babylonsist.blog105.fc2.com/blog-entry-452.html



KOKO and PART

KORE and metonymical extension

Figure (7.6): Two different construals for the same concept

The four different construals discussed in the examples above can be depicted in the following chart (the number of examples added).

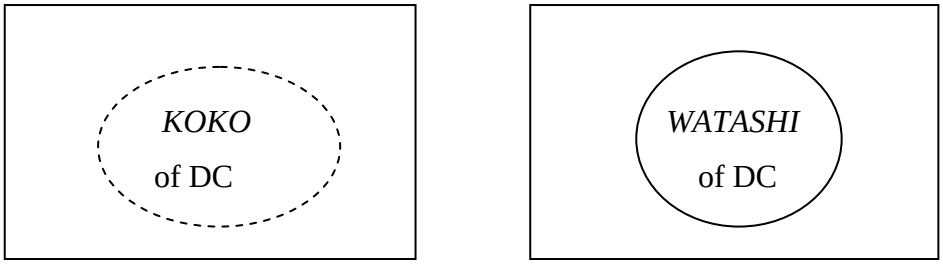
	Direct conceptualization	Metonymical extension
The *–re* suffix	→ THING (bounded) in (20)	- - → INTERIOR (bounded) in (22)
The *–ko* suffix	→ FIELD or LOCATION (fuzzy bounded) in (21)	
	↘ PART (relational and fuzzy bounded) in (23)	

The *–ko* suffix can be used for the same referent with two different conceptualizations (a fuzzy bounded entity as LOCATION and a fuzzy bounded and relational entity as PART), whereas the *–re* suffix represents only a bounded entity as THING, but can extend to the interior through the metonymical concept THE WHOLE FOR THE PART.

7.2.6 Conceptual contrast between the *–re* suffix and FIELD

There is no construal alternative between the *–ko* and *–re* suffixes in FIELD. However, they have a conceptual contrast in the deictic centre.[17] I will discuss what kind of conceptual contrast the *–ko* suffix can have in contrast to the *–re* suffix.

As shown in 5.3.4, there are two different ways of profiling a component of the deictic centre: (i) profiling *KOKO* 'here' as a fuzzy bounded area of the deictic centre and (ii) profiling *WATASHI* 'I' as a bounded entity of the deictic centre. Let us illustrate them as follows:



Fuzzy bounded Bounded

Figure (7.7): Differences of boundedness of the deictic centre

From this contrast, the conceptual counterpart of the *–ko* suffix in FIELD is hypothesized to be HUMAN. Therefore, when considering a conceptual contrast between the *–re* suffix and the *–ko* suffix of FIELD, we have to examine whether the bounded entities represented by the *–re* suffix can be conceptualized as HUMAN, as well as THING (NON-HUMAN).

In modern Japanese, the *–re* suffix of demonstratives is prototypically classified as THING (NON-HUMAN). However, as previous studies remark (Morita 1989 and Takahashi and Suzuki 1989), the *–re* suffix can be used in the third person pronouns as follows:[18]

[17] Although FIELD and the deictic centre overlap at the level of expression, FIELD is a schematic pattern of the *–ko* suffix and a subtype of the concept PLACE, while the deictic centre is a conceptual and pragmatic complex [I, here, now]. When the *–ko* suffix of FIELD is combined with the deictic part *KO-*, *koko* functions as a part of the deictic centre.

[18] It is claimed that in many languages third person pronouns are historically derived from pronominal demonstratives (Givón 1984, Diessel 1999, Lyons 1999, and Shankara Bhat 2004)

(24) (The speaker is a grandfather and introduces his grandchildren.)

‘**Are** wa doomo aisoganai ko de…’

Are TOP indeed unfriendly child COP-LINK

‘That one is an unfriendly child indeed.’

‘**Kore** wa yahari watashino mago de…’

KOre TOP also my grandchild COP-LINK

‘This is also my grandchild.’

Neko wa shitteita (p11)

This way of use of the *–re* suffix is confined to a limited number of situations, usually only referring to family members or close friends, and its style is informal and masculine.[19] Of the personal pronouns in Modern Japanese, the *–re* suffix is used for the third person in the formal style *kare*. For the first person, *ore* is used in the informal and masculine style.

As this confirms that the *–re* suffix can represent HUMAN, the following conceptual contrast between the *–ko* suffix and the *–re* suffix is hypothesized.

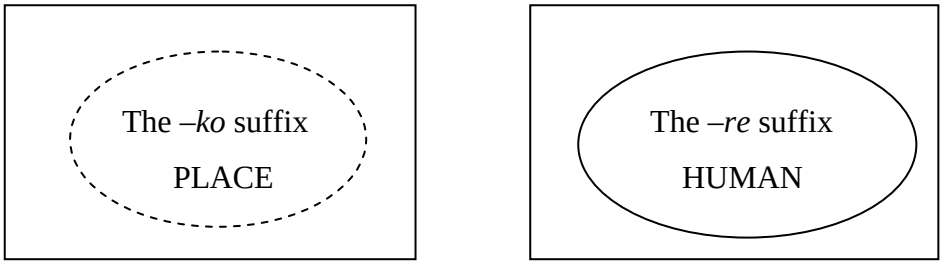


Figure (7.8): Differences of boundedness between the *–ko* suffix and the *–re* suffix

Considering the use of the *–ko* suffix in FIELD, the *–re* suffix representing HUMAN must be the first person because it must be a component of [I, here, now]. In Modern Japanese, only the form *ore* functions as the first person, but, as it is an informal and masculine style, it seems to be difficult to state that the *–ko* suffix in FIELD makes a conceptual contrast with the *–re* suffix in terms of HUMAN (the first person).

[19] The *–itsu* suffix of demonstratives can also refer to PERSON as an informal expression, but it typically implies derogatory meanings.

However, observing Pre-modern Japanese presented in 2.3.3.2, the relationship between the *–re* suffix and HUMAN can be seen more clearly.

Table (7.1): The *–re* suffix of personal pronouns and demonstratives in Pre-modern Japanese

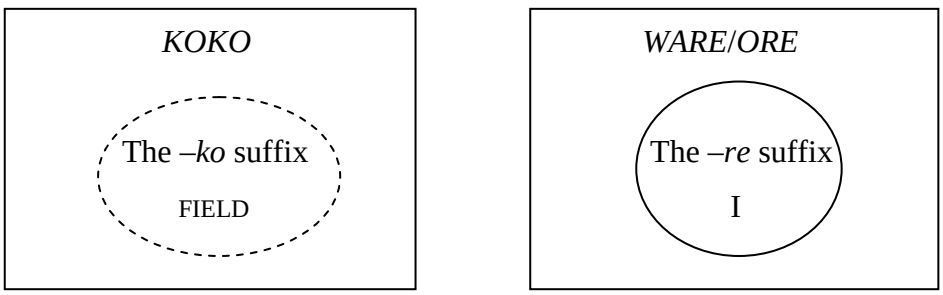
	Speaker	Hearer	neither speaker nor hearer	Indefinite
Person	*ware*	*nare*	NA	*tare*
Thing	*kore*	*sore*	*are*	*idure*

Table (7.1) shows that the *–re* suffix was utilized for both personal and demonstrative pronouns. That is, in Pre-modern Japanese, the deictic centre is represented by [*ware, koko, ima*] as follows:

Table (7.2): The components of the deictic centre

Deixis	Category	Types of entities
WA-	*-re* (person)	spatially bounded entity
KO-	*-ko* (place)	spatially fuzzy bounded entity
I-	*-ma* (time)	spatially fuzzy bounded entity

Even though the use of *ware* in Modern Japanese occurs in limited contexts, such as poetic lyrics and idioms like *ware saki ni* 'scramble to do something', we can suppose that the conceptual contrast between the *–ko* suffix of FIELD and the *–re* suffix of the first person was historically as follows:



Fuzzy bounded Bounded

Figure (7.9): The conceptual contrast between the *–ko* and *–re* suffixes of the FIELD

The above proposal is supported by the fact that there were construal alternatives between the *–ko* suffix of FIELD and the *–re* suffix of the first person in Pre-modern Japanese. For example, *kore* could be used for a spatial expression such as ‘‘*Kore e maire*’’ ‘Come here’ and *koko* is used for the first person in the form of *kokomoto* ‘I’ and ‘toward me’.

7.2.7 Summary

This section discussed construal alternatives between PLACE and THING expressed by the choice of either the *–ko* suffix or the *–re* suffix, the motivation for which consists of two types. Firstly, a profiling shift from prototypical PLACE to THING according to the change of the focus of attention, and secondly, a metonymical extension of the *–re* suffix from THING to PART.

Let us tabulate the correspondence of conceptual contrasts between PLACE and THING and construal alternatives expressed by the *–ko* suffix and the *–re* suffix to summarize the above results.

Table (7.3): Three levels of conceptual contrasts of entities in demonstratives

Morphology	**the *–ko* suffix**	**the *–re* suffix**
Types of Entities	Fuzzy bounded	Bounded
Conceptual contrasts	FIELD	HUMAN (the first person ‘‘I’’)
	LOCATION	THING
	PART	THING
	PART	INTERIOR with metonymical extensions

In Table (7.3), construal alternatives can occur between LOCATION and THING and between PART and THING. Although the *–ko* suffix of the FIELD does not alternate with the *–re* suffix of the deictic centre [I], it does have a conceptual contrast with the *–re* suffix.

This thesis does not purport to extract conceptual meanings of the *–re* suffix. However, we can extract hypothetical extensional properties of the *–re* suffix by means of conceptual contrasts and construal alternatives reflected in the conceptual properties of the *–ko* suffix.

7.3 Temporal expressions of the *–ko* suffix

This section will discuss the relationship between temporal meanings of the *–ko* suffix (based on three conceptual properties FIELD, LOCATION and PART) and other deictic and demonstrative temporal expressions in terms of conceptual contrasts and construal alternatives following the same method as the last section. It is generally known that the *KO*-series of Japanese demonstratives can denote the present time of an event, so I will compare *koko* with other demonstrative expressions such as *kore* 'this' and *kono* NP 'this NP'. Furthermore, it is necessary to have examinations of *koko* in comparison with *ima* 'now' as a temporal deictic expression because of their significance as members of the deictic centre [I, here, now].

7.3.1 SPACE and TIME

First of all, I will introduce basic ideas about SPACE and TIME. There are many previous studies about the relationship between spatial expressions and temporal expressions. One influential hypothesis is called ''localism''. Under this hypothesis, spatial expressions are considered to be more basic, grammatically and semantically, than various kinds of non-spatial expressions.[20] In fact, it is pointed out that the spatialization of time is an obvious and pervasive phenomenon in the grammatical and lexical structure of many of the world's languages (Lyons 1977:718).

The main proposal of localism has been supported by recent typological and cognitive approaches. For example,

> We have to conclude that space and time are linked to each other in human thinking as well. One common way of conceiving of this relationship is by saying that temporal expressions are based on spatial ones, and the transfer is a kind of conceptual metaphor. (Haspelmath 1997b:1)

[20] There are stronger and weaker forms of the localism hypothesis, about which Lyons (1977:724) remarks that ''it is only in a relatively strong version of localism that the linguistic expression of truth and modality, not to mention negation and quantification, would be brought within its scope…the grammatical category of case, and existential and possessive constructions for which a localistic analysis would be far more widely accepted.''

> Time is an abstract concept that is often metaphorically structured in spatial terms. Mapping spatial expressions onto the temporal dimension provides a common history source for the development of temporal markers. (Diessel 1999:139)

As mentioned above, it is cross-linguistically common that spatial expressions are used for temporal expressions. In terms of NP-based time adverbials (different from individual lexical items such as *today* and *yesterday*), Haspelmath (1997b:8) proposes the following major semantic functions typologically:

(I) Location in time

1. Simultaneous location, Hour (*at five o'clock)*, Day part (*in the morning*), Day (*on Tuesday*) etc.,
2. Sequential location**,** Anterior (*before the meal*) and Posterior (*after the war*)
3. Sequential durative, **Anterior-durative** (*until midnight*) and **Posterior-durative** (*from now on*)
4. Temporal distance**, Distance-future** ((*I will return*) *in three weeks*) and **Distance-past** (*two hours ago*)

(II) Temporal extent

1. **Atelic extent** (*for two months*)
2. **Telic extent** ((*I wrote the letter*) *in two hours*)
3. Distance-posterior ((*Bill has been in Manchester*) *for three years*)

In the following sections, I will mainly use the criteria highlighted here for examining temporal deictic expressions including *ima* 'now' and demonstratives such as *koko*, *kore* and *kono* NP.

In the cognitive approach, conceptual metaphors (introduced in 7.2.5.2) are exploited to explain the motivation for construing temporal expressions by means of using spatial expressions. For instance, Fillmore (1997:45) proposes that the movement metaphor for TIME allows one to think of ''the world'' as moving through time, or as being constant and time passing it by Moore (2006) calls these two views the ''Moving-ego metaphor'' and the ''Moving-time metaphor'', respectively. For example, *we are getting close to Easter* shows

the Moving-ego metaphor, while *Christmas is coming* shows the Moving-time metaphor.[21] In hypotheses of conceptual metaphors, the relationship between SPACE and TIME is a mapping from a source domain of SPACE, the source of the literal meaning of the metaphorical expression, to a target domain of TIME, the domain of the experience actually described by the metaphor (Croft and Cruse 2004:46-55).

In general, our SPACE and TIME experiences are supposed to be metaphorically structured by means of a small number of image schemas, one of which is **LINEAR ORDER**: ‘‘primarily, this schema arranges objects in a one-dimensional line. Metaphorically, the ordered arrangement can be applied to temporal sequence. What occurs first happens before, what comes second occurs later’’ (Taylor 2003:136). Haspelmath (1997b:336) also summarizes TIME as: ‘‘time is semantically very simple. It can be thought of as a sequence of points which are located on an imaginary line. Time is one-dimensional and uni-directional in contrast to three-dimensional space. Time is not bounded on either side.’’ Following Taylor and Haspelmath’s concept of TIME, I will examine temporal deictic expressions in terms of LINEAR ORDER image schema.

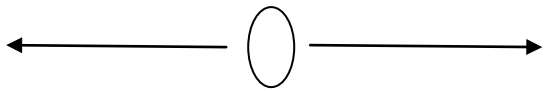
7.3.2 TIME line and EVENT structure

Concerning the TIME line based on the LINEAR ORDER image schema, Frawley (1992:282) proposes two basic ways of dividing up TIME in all languages: ‘‘vectorially’’ or ‘‘metrically’’. For instance, English has a vectorial system in which TIME is a simple extension from a point of origin, e.g. ‘backward’ from the present point into the past or ‘forward’ from a point into the future. As an example of a metrical system, Manam has different markers for measurements of *days* in the past and *days* in the future (Lichtenberk 1983).[22] In these classifications, Japanese temporal deictic expressions are hypothesized to belong to a vectorial system.

[21] In addition to two types of temporal metaphors, Moore (2006) proposes another type of metaphor ‘‘SEQUENCE IS RELATIVE POSITION ON A PATH’’, in which TIME is determined relative to another point in time not related to the deictic centre, e.g. *The sound of an explosion followed the flash*. I will discuss this type of metaphorical TIME extension in 7.3.7. Shinohara (2006, 2008) and Iwasaki (2009) have examined Japanese expressions based on Moore’s analysis.

[22] Frawley (1992:282) illustrates the difference between a vectorial system in English and a metrical system in Manam as follows: ‘‘English *then* does not denote a specific unit of time removed either to the past or future, only that time is extended as a vector from the present. Manam has two temporal deictics for the present, both of which refer to the unit ‘today’, one for ‘any time today’ and one for ‘time prior to the time of utterance but still today’’.

Considering the relationship between temporal deixis and the TIME line, the main reference point is the present, that is, the utterance time (alternatively called the moment of speech or the coding time of speech). Frawley (1992:337) represents the ‘‘Basic TIME line’’ as follows:



Here-and-Now

Figure (7.10): Basic TIME line

The unique characteristic of this figure is that the TIME line is depicted as bi-directional, rather than as unidirectional from the past to the future. This is because the centre point of the Basic TIME line is established as the deictic centre [I, here, now], where any temporal deictic locations are represented as unbounded and unidimensional and stretch outward in either direction from a central zero-point, the here-and-now.

It is generally considered that linguistic phenomena of TIME are lexicalized or grammaticalized by temporal expressions such as verbs reflected for tense, or adverbial phrases with tenseless verbs, which conceptually encode EVENT as the basic counterpart of ENTITY, which is realized by noun phrases (Frawley 1992 and Lyons 1995). Therefore, we have to consider temporal expressions in terms of the relation between TIME and EVENT. From this viewpoint, Frawley (1992) proposes a typology of events, consisting of (i) internal event structures such as states, acts, inchoatives and resultatives, and (ii) time intervals.

> Time is viewed as a line composed of elementary points called ‘‘moments’’. A group of moments along the time line defines a subinterval, and any group of subintervals results in an interval. Subintervals are optional, depending on the nature of the event distributed over the time.

Based on the above idea, Frawley (1992:188) presents the following diagram of the concept of time intervals.

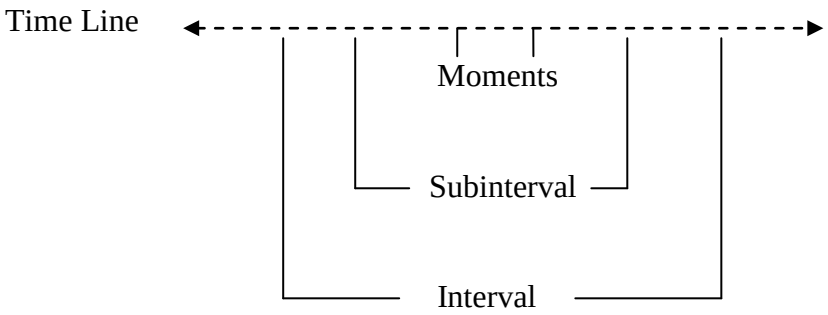


Figure (7.11): Structure of the TIME line

In addition to the Basic TIME line, the prototypical present moment is the Here-and-Now of the deictic centre. Although Frawley examines the relationship between the internal event structure and the structure of the TIME line, I will concentrate on the Basic TIME line and the structure of TIME line schema in the domain of TIME in order to discuss deictic and demonstrative temporal expressions with verbs instead of the concept EVENT itself.

7.3.3 Previous studies of temporal deictic and demonstrative expressions

In previous studies (Takeuchi 2007 and Taguchi 2010), it is generally suggested that *ima* 'now' and *kore* 'this' are interchangeable in many contexts with the expression of sequential duratives (according to Haspelmath as outlined in 7.3.1) such as 'until now' and 'from now on'. We will discuss two types of sequential durative expressions: one takes the form of a temporal expression plus Anterior-durative *made* 'until', and the other is a temporal expression plus Posterior-durative *kara* 'from'. Observe the following examples.

(25) Naruhodo shaseesuru to **ima made** kinotsukanakatta mono no katachi ya
I see sketch COMP now until did not notice thing GEN shape and.
iro no seesaina henka nado ga yoku wakaru yoo da.
colour GEN detailed change etc NOM well notice seem COP
'I see! When I sketch it, it seems that I recognize shapes and subtle changes of colour that I didn't notice before.'
CAT

(26) Boku wa **kore kara** Nihonbashi no Engeekyoofuukai ni
I TOP KOre from Nihonbashi GEN Engeekyoofuukai LOC
Ikanakucha naran kara soko made isshoni ikoo.
go-LINK must because there by together let's go
'I have to go to Engeekyoofuukai in Nihonbashi now. So, let's go together just around the corner.'
CAT

In both the Anterior-durative expression *ima made* 'until now' in (25) and the Posterior-durative expression *kore kara* 'from now on' in (26), *ima* and *kore* are interchangeable without changing their meanings and situational contexts. Thus, *kore*, in such instances, is regarded as designating the coding time of speech in the same way as *ima*.

However, it has been pointed out that some contexts have a slightly different sensitivity to the moment of the utterance time in the use of *ima* and *kore*. Takeuchi (2007) describes several conditions in the following examples.

(27) {**Ima**/***Kore**} made furo ni haitte ita kara denwa ni
Now KOre until bath to enter-LINK exist because phone call to
derarenakute gomen. [T]
not answer-LINK sorry
'I am sorry for not answering your phone call, but I was in the bath until now.'

(28) Mata tesuto de rei ten totte. {**Ima**/**Kore**} kara benkyooshinasai.
Again test LOC zero mark got-LINK now KOre from study
'You got zero marks again. Study hard from now on!' [T]

Example (27) illustrates that the moment immediately after an event, Anterior-durative, can be designated by *ima* but not by *kore*. Example (28) shows that both *ima* and *kore* can be used with Posterior-durative interpretations, but their implications are slightly different. *Ima kara* indicates just right now, whereas *kore kara* is used for any future time including right now. On the other hand, Takeuchi (2007) demonstrates that the acceptability of *ima* decreases when the immediacy of the moment of an event decreases. Compare the following two examples.

(29) {**Ima**/**Kore**} **kara** isshoni kite kudasai. [T]
now KOre from together come-LINK please
'Please come with me now.'

(30) {***Ima**/**Kore**} **kara** isshoni kite moraitai nodesu ga...30 pun **go**
now KOre from together come-LINK want it is that but 30 minute later
ni mukaeni kimasu. [T]
at meet come
'Please come with me. I will come to get you in thirty minutes.'

In the first example, (29), *ima kara* and *kore kara* have almost identical meanings, both translatable as 'from now on'. It is very difficult to recognize any significant difference between them. However, if the succeeding event is not so close to the coding time of speech, but in the near future, (e.g. 30 minutes later) as in (30), *ima* is not acceptable. This indicates that the time gap between the time of the utterance with *ima kara* and the future event (meet again thirty minutes later) leads to the unacceptability of *ima*.

As a result, Takeuchi defines *ima* with sequential duratives as the temporal relation between earlier and later including the utterance time, and *kore* with sequential duratives as a starting point for the future and an end point from the past excluding the immediate utterance time. Takeuchi (2007:35) depicts this model as follows: [23]

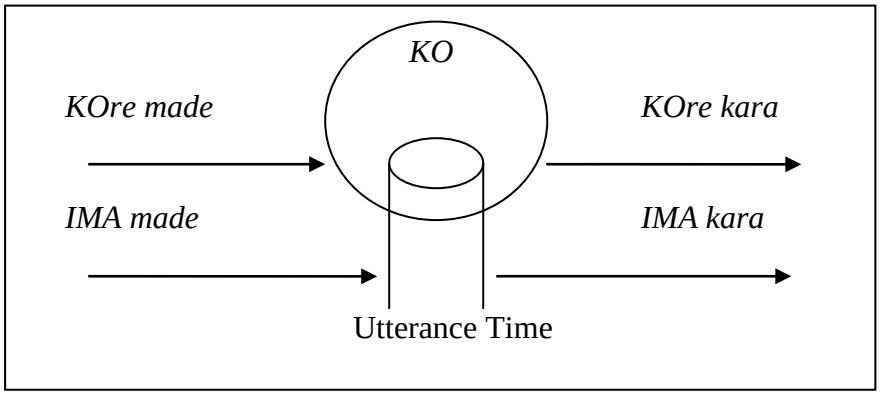


Figure (7.12): *IMA* and *KOre* with sequential duratives

[23]As one piece of evidence for his definitions, Takeuchi (2007) remarks on the difference between *ima* and *kore* in use with Anterior-durative *made* 'until', in which expressions of Time-extent with the construction [temporal expression ***kara kore made no aida***] 'for this period since a temporal expression' are difficult to be used and only *ima made no aida* 'for the period until now' is acceptable. However, a Google search demonstrates many counterexamples such as *umarete kara kore made no aida* 'for the period since I was born until this' and *asa okite kara kore made no aida* 'the period since I got up this morning until this'.

Figure (7.12) shows that the essential difference between *ima* and *kore* with sequential duratives is the presence or absence of direct accessibility to the utterance time, where Takeuchi (2007) considers that the *KO*-series of *kore* cannot completely overlap with *ima*.[24]

Taguchi (2010) presents several examples that provide supporting evidence for Takeuchi's research with regards to the *KO*-series of demonstratives (*kono* NP and *kore*) and *ima* with temporal expressions. Concerning the different sensitivity to the immediacy of the utterance time, Takeuchi describes the following temporal expressions using *tokoro* 'place'[25] (taken from Taguchi).

(31) Shigoto no chooshi wa doo desu ka. [T]
job GEN condition TOP how COP Q
'How is your job going?'
{**ima no**/ **kono**} **tokoro** wa.
now GEN KOno TOKORO TOP
'It is good.'

In Japanese, there are two ways of answering 'How's it going?'. Compared with the neutral expression *kono tokoro* 'around this time', *ima no tokoro* 'up until now' indicates a relatively short period including the coding time of speech and implies ''so far so good but we don't know about later yet''.

Although Takeuchi (2007) and Taguchi (2010) do not compare *koko* with *ima* and *kore*, I basically agree with their observations and attempt to apply them to the analysis of *koko* with sequential duratives. In previous studies of the *–ko* suffix, Morita (1989) and Takahashi and Suzuki (1989) present several temporal uses of *koko*.

(32) **Ima koko de** kokoro o irekaete doryokusureba [M]
now KOko LOC mind ACC change if make an effort
'If you change your attitude and make an effort right here and now,'

[24] In Takeuchi 2007, *koko* is not analyzed.
[25] *Tokoro* is an abstract notion of 'place'. Thus, forms with *tokoro* have various usages and diverse grammaticalizations, for instance, the connective ***tokoro****ga* 'however' and the modal auxiliary Verb ***tokoro****da* 'be just about to Verb' amongst others. See Teramura (1993b), Aoki (2000) and Sunakawa (2000).

(33) Ame wa **koko toobun** wa furanai deshoo. [M]
rain TOP KOko while TOP will not rain COP-probable
'It probably won't rain for a while'

(34) **Koko shibaraku** wa nihon o hanare nai yotei desu. [M]
KOko while TOP Japan ACC leave not plan COP
'I'm planning not to leave Japan for a while.'

(35) **Koko isshuukan** toyuu mono wa neta kiri deshita. [M]
Koko one week called COMP TOP laid just COP
'He has been in bed for around one week.'

(36) (Watching a screen with a stop watch)
X: Sutoppu. **Koko kara** da. Jikan wa? [T and S]
stop KOko from COP time TOP
'Stop. It is from now on. What time is it?'

Example (32) indicates that *koko* can co-occur with *ima*. Although *toobun* 'while' in (33) can only be accompanied with *koko*, *shibarak*u 'while' in (34) can be modified by *ima* in the form of *ima shibaraku* 'for a while'. *Koko isshuukan* 'for this week' in (35) can be rephrased as *kono isshuukan* 'for this week'. (36) demonstrates that *koko* can be used with the Posterior-durative expression *kara* in the same way that *ima* and *kore* can be.

Additionally, there are the following temporal expressions using *koko* in my data.

(37) **Koko no tokoro** iroirona mono ga atama ni hikkakari sugiru.
KOko GEN TOKORO various thing NOM head LOC catch too much
'These days, I have had too many things on my mind.'
WORLD

(38) Shujin mo **koko made** kitara tsuideni ‘‘oo kowa’’ to demo iisoona
master too KOko until come if incidentally oh scary QUO even seem to say
mono dearu ga nakanaka iwanai.
COMP COP but not nearly not say
‘My master should say at this moment, ‘‘Oh scary’’. But he does not say it.’’
CAT

Example (37) illustrates temporal expressions having the form of *koko* plus genitive case *no* plus *tokoro* ‘place’, in the same constructions that *kono tokoro* and *ima no tokoro* occur in. Example (38) shows that *koko made* is also possible for temporal expressions such as *ima made* and *kore made* which we have already observed in previous studies.

However, as yet there are no systematic studies of temporal expressions including the *–ko* suffix. In the following sections, I will examine which facet of the TIME line the *–ko* suffix of *koko* can profile, and how it contrasts with other deictic temporal expressions such as *ima*, *kore* and *kono* NP.

7.3.4 Conceptual contrasts and construal alternatives of *KOko* with other temporal expressions

This section will describe *koko* as it is used as a temporal expression. As seen in the preceding section, *koko* occurs with various temporal phrasal constructions in the same way as *ima*, *kore* and *kono*, and sometimes appears with **contextually** identical meanings. Therefore, I will investigate *koko* as a temporal expression from the perspective of **conceptual contrasts** and **construal alternatives** with other deictic and demonstrative temporal expressions.

So far, this thesis has clarified the relation between three properties of the *–ko* suffix (FIELD, LOCATION and PART) and other conceptual properties (deictic contrasts and the *–re* suffix). As far as temporal expressions are concerned, I will demonstrate how the three properties of the *–ko* suffix can profile different facets of the TIME line and motivate construal alternatives with other temporal expressions.

7.3.4.1 Prototypical TIME profiling of the *KO*-series

With regards to the reason why *ima, kore, koko,* and *kono* NP can possess similar kinds of or identical meanings in some contexts, it is generally hypothesized that they share a common semantic property which resides morphologically in the deictic root of the *KO*-series present in all forms.

Ima, however, is different since it is a purely temporal expression, while the other demonstrative expressions metaphorically or metonymically extend to a temporal proximity mapped from the spatial proximity of the *KO*-series. For instance, Lyons (1977:718) remarks on the relationship between temporal deictic expressions and demonstrative expressions:

> As 'here' and 'there' can be analysed as meaning ''at this place'' and ''at that place'', respectively, so 'now' and 'then' can be analysed as ''at this time'' and ''at that time''. Moreover, by virtue of the interdependence of time and distance…there is a direct correlation between temporal and spatial remoteness from the deictic zero-point of the here-now.

In Japanese, the deictic centre is composed of [ima, koko, watashi] 'now, here, I', and there is an interesting proposal about the semantic similarity of the origins of *ima* and *koko*. From the comparative study of Japanese and Korean vowel systems, Frellesvig and Whitman (2008) reconstruct Proto-Japanese and they propose some similarities between the demonstrative system of Korean and Japanese. As seen in 2.3.3.1, the *KO*-series seems to have appeared around the Old Japanese period (AD 700-800). Before this, Frellesvig and Whitman (2008) hypothesize that the deictic roots for proximal in Proto-Japanese were the same as those of the Korean proximal demonstratives *I*-series, which was lost during the Old Japanese period, but is vestigially retained in the wh-interrogative *I-du-* in Old-Japanese and *I-ma* 'now' in Modern Japanese.

Following Frellesvig and Whitman (2008), although *ima* is a lexically simple expression in Modern Japanese, the *i-* of *ima* could be historically related with the proximal series of Korean and the *–ma* ending is lexically associated with the simple expression *ma* 'interval'. Thus, the literal meaning of *ima* is reconstructed as 'proximal interval'.

Given this assumption, a fundamental semantic difference of the deictic centre between *ima* and *koko* can be deduced in the difference between the *–ko* suffix and the *–ma*

part of *ima*.[26] Furthermore, we can compare *ima* with other temporal expressions of demonstratives such as *kore* and *kono* NP with respect to the similarity of proximal meanings with the *KO*-series. From this perspective, we can analyze deictic and demonstrative temporal expressions as having the following morphological and conceptual divisions:

The part of shared property 'proximity' creating a basis of construal alternatives	The endings creating conceptual contrasts
I-	*-ma* 'INTERVAL'
KO-	*-ko* 'FIELD, LOCATION, PART'
KO-	*-re* 'THING'
KO-	*-no* + NP 'ATTRIBUTE'

That is, the reason why deictic temporal expressions are interchangeable in some contexts, as described in the previous section, is that the shared property of the deictic root creates a common basis for construal alternatives among them, and the difference of the endings (categorical suffixes) motivates their conceptual contrasts in order to profile various facets of the TIME line respectively.

Next, I will demonstrate how the *KO*-series can be mapped into the domain of TIME from that of SPACE. In accordance with the ''invariance principle'' proposed by Lakoff (1990, 1993), in which ''metaphorical mappings preserve the cognitive topology (that is, image-schematic structure) of the source domain in a way consistent with the inherent structure of the target domain'',[27] I will assume that the basic spatial properties of the *KO*-series, which are **DISTANCE** (proximity to the deictic centre) and **DIRECTIONALITY** (away from or toward the deictic centre), remain in the temporal domain as well.[28]

[26] In 7.2.6, we have discussed the deictic centre in terms of conceptual contrasts, in which I pointed out that the first person of the DC is *WA-re* in classical Japanese. That is, components of the DC could be morphologically reanalyzed as: (i) [WA-re] (deictic root plus PERSON), (ii) [KO-ko] (deictic root plus PLACE), and (iii) [I-ma] (deictic root plus INTERVAL).

[27] Concerning the ''invariance principle'', see Turner (1990) and Croft and Cruse (2004)

[28] Frawley (1992:275) proposes the following basic semantic structure of spatial deixis: reference point (speaker or hearer), remoteness (proximal or distal) and direction (toward or away from the reference point).

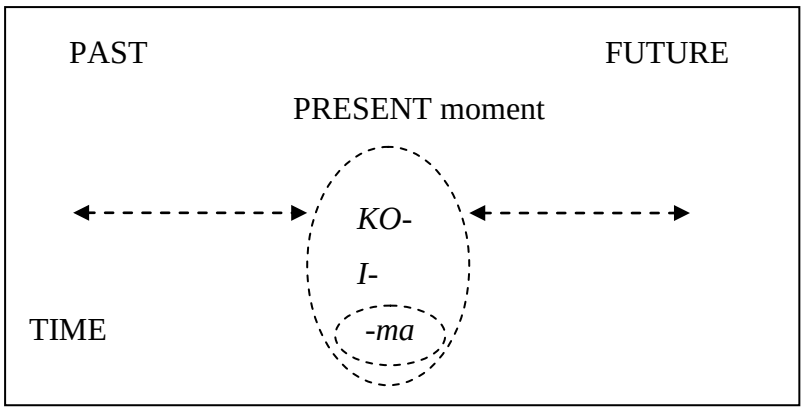


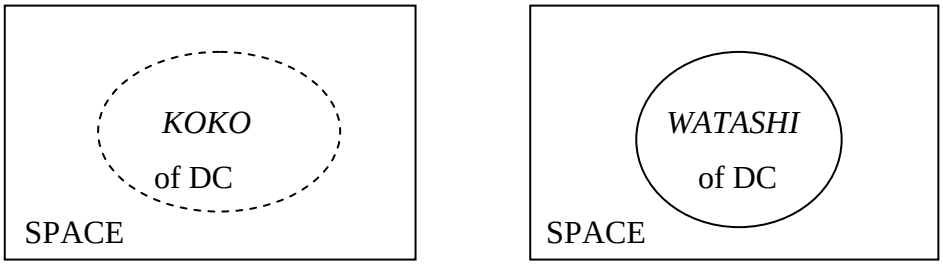
Figure (7.13): The conceptualization of the *KO*-series in the TIME domain

Figure (7.13) signifies a simple image of a prototypical temporal profiling of the *KO*-series in the TIME domain. The two arrows for the TIME line show bi-directionality, which we will discuss in connection with sequential duratives in 7.3.5. The *KO*-series in the exophoric use is always anchored to the moment of an utterance (PRESENT). As pointed out in previous studies, the moment of the *KO*-series can be proximal to the deictic centre but does not overlap with it as *ima* does (I will exemplify this in later sections). Strictly speaking and from a diachronic perspective, the difference between the *KO*-series and *Ima* is hypothesized to reside in the *–ma* part of *ima*, which can be represented in Figure (7.13) as the larger circle of the *KO*-series and the *I-* part of *ima* encompassing the *–ma* ending. However, synchronically, Modern Japanese loses the morphological division between *I-* and *–ma*, so that I will describe *ima* as a lexically simple expression.

In the following discussion, in order to consider various conceptual contrasts between temporally extended *koko* and other expressions, I will also employ the three properties of the *–ko* suffix, FIELD, LOCATION and PART, which motivate how a particular facet of the TIME line is profiled differently from other temporal expressions.

7.3.4.2 Conceptual contrasts between *IMA* and PART of *KOko*

First of all, I will start by discussing conceptual contrasts between *ima* and *koko* as temporal expressions in terms of the components of the deictic centre. Let us recall the conceptual contrast between *koko* and *watashi* 'I' in the DC in Figure (7.7).



Fuzzy bounded Bounded

Figure (7.7): Differences of boundedness of the deictic centre

When the deictic centre is conceptualized as fuzzy bounded, it is realized using *koko*, and when it is bounded it is realized using *watashi* in Japanese. It is important to notice that both are entities in the domain SPACE. So far, I have excluded *ima* from the discussion of the DC, because only *ima* is conceptualized in the domain TIME instead of SPACE. Next, let us schematise the simple conceptualization of *ima* of the DC in the domain TIME.

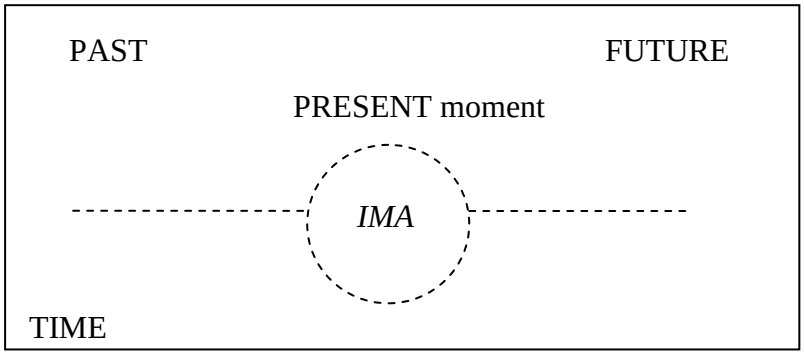


Figure (7.14): The conceptualization of *IMA*

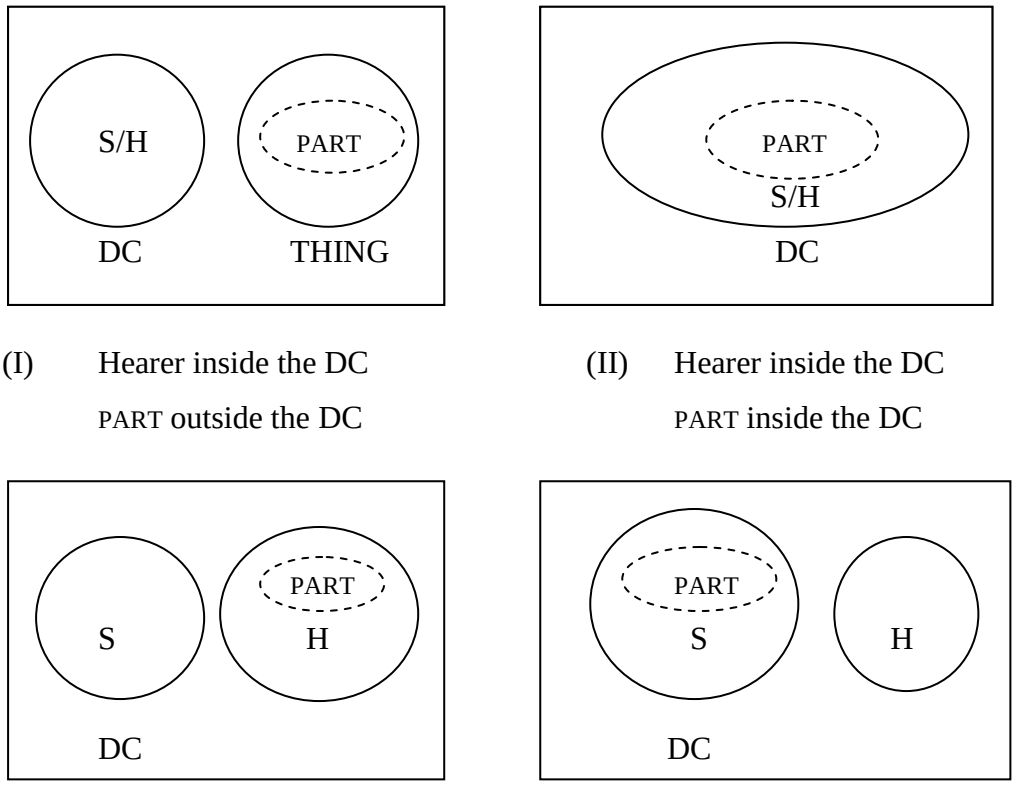
Compared with the *KO*-series in the TIME domain in Figure (7.13), the TIME line associated with *ima* is not bounded and lacks directionality (represented by the lack of arrows on the TIME line). This is different from the demonstrativeness of the *KO*-series. Furthermore, the PRESENT moment of *ima* is also hypothesized as being fuzzy bounded in contrast with the bounded entity *watashi* of the DC (represented as a broken-lined circle).

It is important to recall that the *–ko* suffix alone cannot be a deictic expression or a demonstrative. Therefore, it is only in the combination with the *KO*-series that the *–ko* suffix can be mapped onto the domain TIME from SPACE. This thesis has proposed three conceptual properties of the *–ko* suffix. Of these, FIELD of the *–ko* suffix is a component of the DC and is in a complementary conceptual distribution with *ima*. This indicates that FIELD

cannot have construal alternatives with *ima* in terms of temporal meaning, because, if it were possible, it would identically correspond to *ima* as a component of the DC and would not create any difference between them. Therefore, in simple temporal expressions, *koko* of FIELD cannot be replaced by *ima* in sentences like *ima nan ji desu ka* 'What time is it now' and *ima isogashii desu* 'I am busy now', which are represented in Figure (7.14). I will discuss construal alternatives of FIELD of *koko* with other temporal expressions in 7.3.6.

Concerning LOCATION of the *–ko* suffix, its main characteristic is that it does ''not intersect with the DC'', so we can also exclude LOCATION from construal alternatives with *ima*. Temporal expressions of LOCATION will be discussed along with FUTURE and PAST in 7.3.7 and the ENDOPHORIC in 7.3.8 .

Finally, of the three properties of the *–ko* suffix, only PART of the *–ko* suffix is allowed for construal alternatives between *ima* and *koko*, the main characteristic of which is **fuzzy bounded** and **relational**. Let us reconfirm the four construal types of PART of the *–ko* suffix presented in Figure (6.24):



(I) Hearer inside the DC
PART outside the DC

(II) Hearer inside the DC
PART inside the DC

(III) Hearer outside the DC
PART outside the DC

(IV) Hearer outside the DC
PART inside the DC

Figure (6.24): Four types of construals in PART

As can be seen from (II) and (IV), PART can be realized inside the deictic centre, which manifests the possibility that PART of *koko* can co-occur with *ima* of the DC.

The most important characteristic of PART in the TIME domain is a relationality with EVENT, which functions as WHOLE of a facet of the TIME line profiled by PART of the *–ko* suffix. Let us depict the conceptualization of PART in the TIME domain.

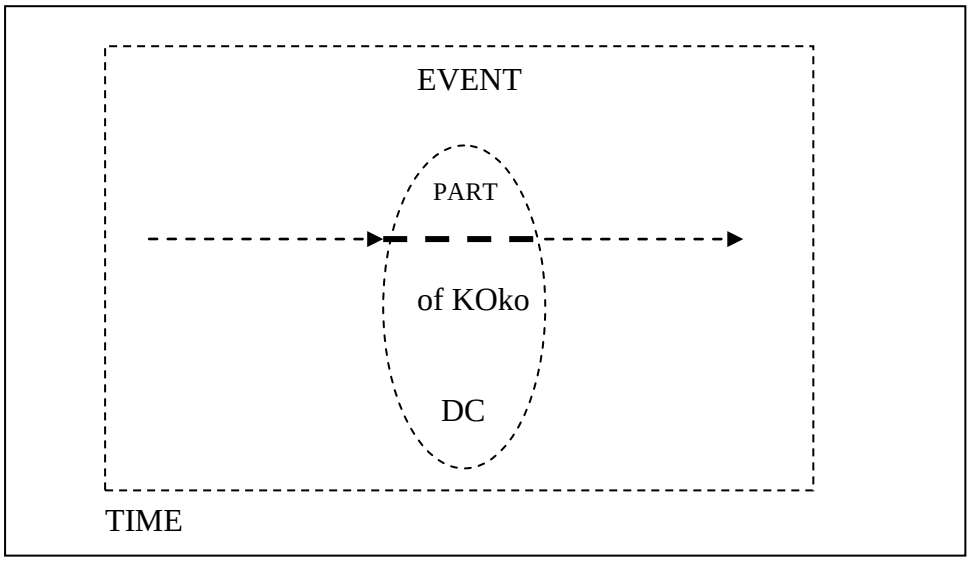


Figure (7.15): The conceptualization of PART in TIME

PART presupposes an EVENT schema for the relationality of the PART-WHOLE relation and must profile a facet of the TIME line in the middle of an EVENT. Let us observe this point in the following examples. As mentioned in the previous literature, *ima* and *koko* can co-exist to express the same meaning of TIME in some contexts. The following utterance often appears during a speech.

(39) **Ima koko** de mondai ni natte mairimasu no wa
now KOko LOC question to become-LINK come COMP TOP
'Now, the question arises.'
FETUS

Koko de can be used literally as a locative expression such as 'at this place', but, in (39), *koko de* refers to a present moment of EVENT. This example can have the following alternative patterns:

(40) **Ima** mondai ni natte mairimasu no wa
now question to become-LINK come COMP TOP
'Now, the question arises.'

(41) **Koko** de mondai ni natte mairimasu no wa
KOko LOC question to become-LINK come COMP TOP
'Now, the question arises.'

Even though *ima* and *koko de* are employed separately, their temporal meanings in the sentences keep almost the same meaning as in their alternative wording. We can regard this as a construal alternative. It is conceivable that the difference between *ima* and *koko* is that *koko* profiles a facet of TIME as part of a whole interval in an EVENT, while *ima* simply profiles a facet of TIME as a PRESENT moment **irreverent to profiling an EVENT**.

Let us look at one more example. The discourse situation is that, when the man sharing the same room with the speaker went to the bath, the speaker attempts to steal his tobacco pipe.

(42) Yatsu san tenugui o burasagete yu ni dekaketa kara
guy Mr towel ACC hang-LINK bath LOC went out because
nomunara **koko** da to omotte
if smoke KOko COP COMP think-LINK
'I thought if I'm going to smoke, now is my chance because the man went out with his towel over his shoulder.'
CAT

In (42), *ima* is perfectly acceptable instead of *koko* with a contextually identical meaning. However, the conceptual difference between the two can be described as: the speaker uses *koko* to profile the TIME when the man who shares the room went out, while *ima* is used to profile the TIME when it is the moment to steal his tobacco pipe. To rephrase, *koko* presupposes an EVENT as a cognitive ground and designates the PRESENT moment as a part of an EVENT interval, whereas *ima* concentrates on the moment of an ACTION irrespective of the sequence of EVENTs. I will demonstrate this difference in Figures (7.16) and (7.17)

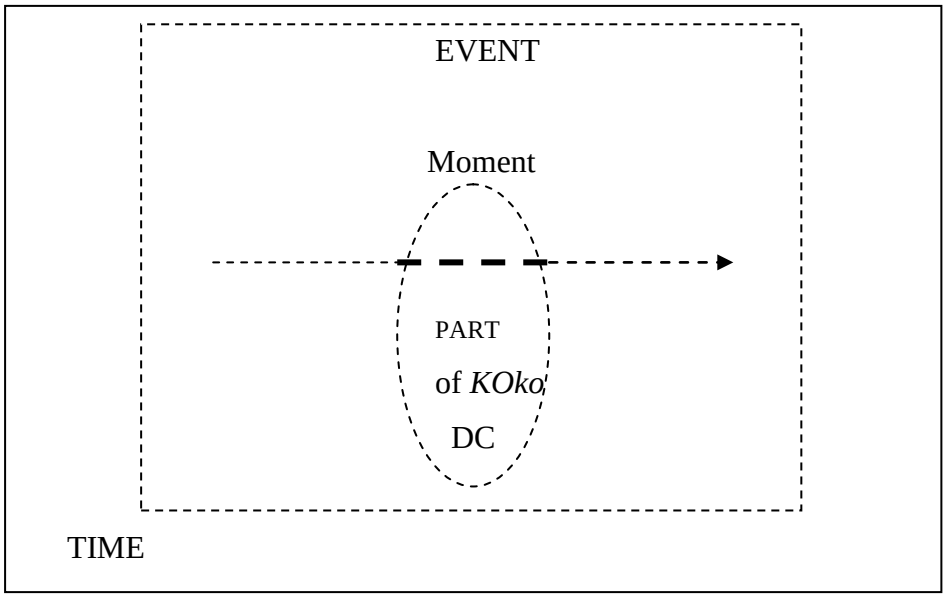


Figure (7.16): Profiling the TIME line by PART of *KOko*

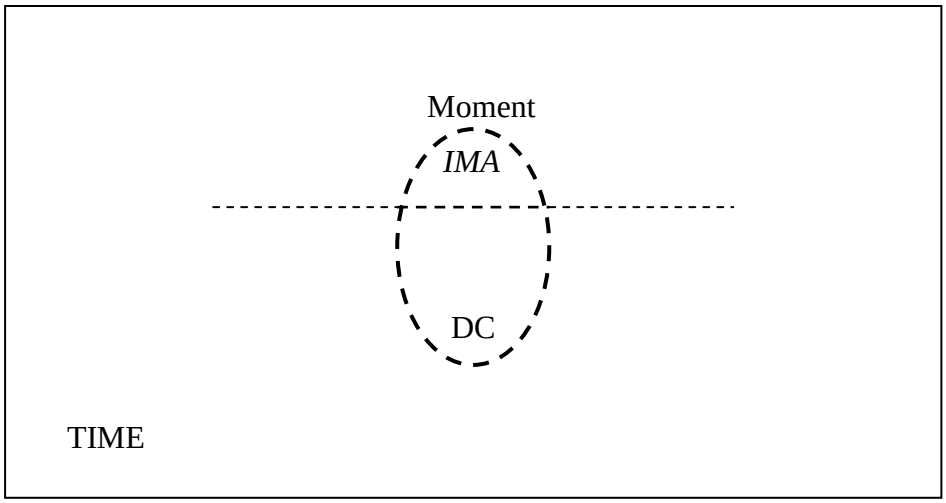


Figure (7.17): Profiling the TIME line by *IMA* as the DC

The different ways to profile a facet of the TIME line between *ima* and PART of *koko* is reflected as the presence or absence of DIRECTIONALITY (signified by an arrow) and highlighting the circle to represent the moment of the utterance instead of a part of a TIME line.

In the following section, by means of using the conceptual contrast above I will compare temporal expressions with sequential duratives which contain PART of *ima, kore* and *koko*.

7.3.5 Conceptual contrasts and construal alternatives of PART of *KOko* with sequential duratives

I will begin by listing the temporal expressions of sequential duratives in this section. These are:

Anterior-durative 'until':	*Ima*	*made*
	Kore	*made*
	Koko	*made*
Posterior-durative 'from':	*Ima*	*kara*
	Kore	*kara*
	Koko	*kara*

First of all, let us reconfirm the cases where *ima* and *kore* are interchangeable with a contextually identical meaning as discussed in 7.3.3.

(43) Naruhodo shaseesuru to {**ima/kore}** **made** kinotsukanakatta mono no I
see sketch COMP now KOre until did not notice thing GEN
Katachi ya iro no seesaina henka nado ga yoku wakaru yoo da.
Shape and colour GEN detailed change etc NOM well notice seem COP
'I see! When I sketch it, it seems that I recognize shapes and subtle changes of colour that I didn't notice before.'
CAT

(44) Boku wa {**ima/kore}** **kara** Nihonbashi no Engeekyoofuukai ni
I TOP now KOre from Nihonbashi GEN Engeekyoofuukai LOC
ikanakucha naran kara soko made issho-ni ikoo.
go-LINK must because there by together let's go
'I have to go to Engeekyoofuukai in Nihonbashi now. So, let's go together just around the corner.'
CAT

In (43) with the Anterior-durative *made* and in (44) with the Posterior-durative *kara*, *ima* and *kore* occur with the same contextual meaning. However, *koko* cannot replace them as a temporal expression, i.e. *koko kara* 'from *KOko*' in (44) could function only as a locative expression. In order to examine the property shared by *ima* and *kore* which distinguishes them from *koko*, let us firstly extract the temporal schema of *ima* and *kore*.

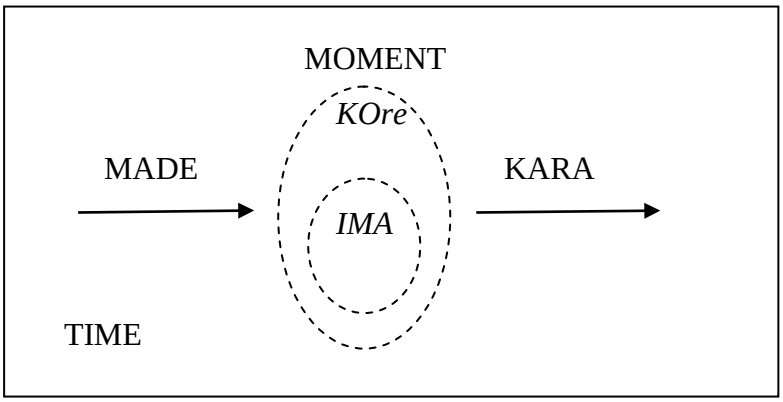


Figure (7.18): Profiling the TIME line by *IMA* and *KOre*

In this figure, I depict not the contextual, but the conceptual difference between *ima* and *kore* with the different size of the circles. The smaller circle of *IMA* represents a relatively shorter MOMENT than the larger circle of *KOre*, according to Takeuchi's definition. Highlighted arrows for *MADE* and *KARA* indicate the profiled intervals of the TIME line in the speaker's construal.

Next, observe the prototypical example of *koko* with Anterior- and Posterior-duratives, which cannot be replaced by *ima* and *kore*. The discourse situation is to present sponsors on TV in an intermission of a programme or a movie.

(45) **Koko made** no hoosoo wa (sponsors' names), hikituzuki
KOko until GEN broadcast TOP in the following
koko kara wa (sponsors' names)
KOko from TOP
'Until now, presented by (sponsors' names) and from now, by (sponsors' names).'

This example illustrates the essential nature of using *koko* with sequential duratives, which is to profile a moment of the TIME line within an EVENT (as a background). That is, an EVENT must be presupposed in the speaker's construal as the background to the discourse

and *koko* with sequential duratives profiles a momentary part in the mid-interval of an EVENT. As seen in the last section, this characteristic of *koko* is conceptually motivated by the ‘‘relationality’’ of PART of the *–ko* suffix.

This explains why *koko* is disallowed in (43) and (44), because both examples do not occur in the middle of an EVENT, e.g. suddenness of recognition at the moment in (43) and the beginning point of a new event in (44). Let us depict how a speaker profiles the TIME line with PART of *koko* with sequential duratives.

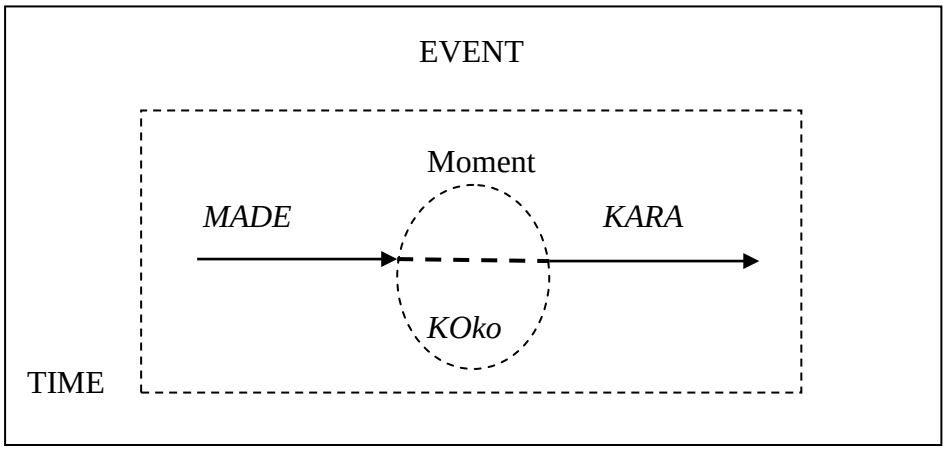
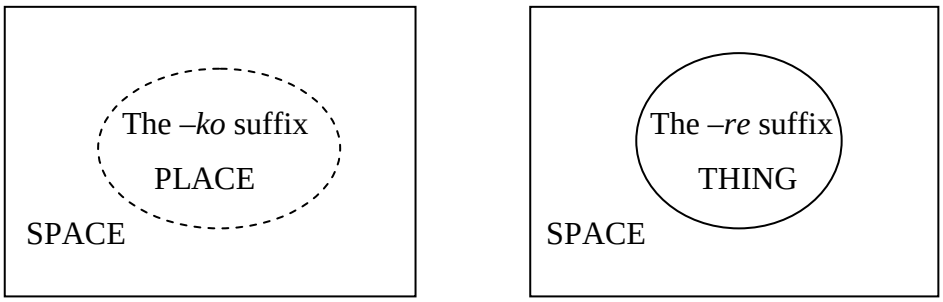


Figure (7.19): Profiling the TIME line by *KOko*

Compared with Figure (7.18), the figure above imposes an extra concept, EVENT, which functions as the background to the TIME interval, whereas *ima* and *kore* with sequential duratives need not always appear inside an EVENT schema. Furthermore, the broken line inside the circle of a moment is important, and shows the continuum of TIME over the EVENT in the speaker’s construal. **PART of the *–ko* suffix profiles the momentary part of an EVENT interva**l.

7.3.5.1 *IMA, KOre* and PART of *KOko* with Anterior-durative *made*

This section will detail the construal alternatives among *ima, kore* and PART of *koko* with Anterior-durative *made*. First of all, I will demonstrate a fundamental difference between PART of the *–ko* suffix and the *–re* suffix with Anterior-durative. Let us recall the conceptual contrast between the *–ko* suffix and the *–re* suffix in the domain SPACE with Figure (7.1).



fuzzy bounded bounded

Figure (7.1): Differences of boundedness between the *–ko* suffix and the *–re* suffix

This difference is based on whether an entity is conceptualized as fuzzy bounded or bounded, and is also considered to remain in the domain TIME, according to the ‘‘invariance principle’’. The following typical discourse situation can clarify a conceptual contrast between PART of the *–ko* suffix and the *–re* suffix as temporal expressions, both of which are employed to signal the end of any type of competitive EVENTS including sports, card games and examinations.

(45) a. Hai, {**koko/soko}** made.
well KOko SOko until
‘Well, time’s up.’

b. Hai, {**kore/sore}** made.
well KOre SOre until
‘Well, stop now.’

The difference between the *KO*-series and the *SO*-series resides in the deictic contrast, where the *KO*-series is generally used for the case where the game includes the speaker, while the *SO*-series is mainly used by the referee or the supervisor.[29] The deictic contrast between the *KO*- and *SO*-series as seen in (45a) and (45b) is based on the PERSON contrast, where the speaker uses the *SO*-series to profile the hearer. As discussed in 6.4.3, PART of the *–ko* suffix can designate inside the deictic centre with the *SO*-series by means of a profiling shift, e.g.

[29] This is explicable in terms of ‘’subjectivity’’ and ‘‘objectivity’’ of construals, introduced in 7.3.8.

when the speaker's tooth is pointed out by a dentist and the speaker uses the *SO*-series to refer to his own body part (a spatial referent inside the DC). According to the ''invariance principle'', this characteristic is also assumed to be maintained in the TIME domain, where the PRESENT moment inside the DC can be denoted by profiling the hearer with the PERSON contrast. (I will discuss the case of using the *SO*-series in the LOCATION in 7.3.7).

The conceptual contrast created by the *–ko* suffix and the *–re* suffix is related to the type of accomplishment of an EVENT. For instance, in an examination, *soko made* implies that you have to put down your pencil even though you have not finished the paper yet, while *sore made* is used simply to note that the examination is ended. In wrestling, PART of the *–ko* suffix typically indicates that the time is up for the match in the middle of an EVENT regardless of whether or not a result has been obtained, whereas the *–re* suffix indicates that the outcome of the game has been determined. Let us represent this conceptual contrast in the domain TIME with an EVENT schema.

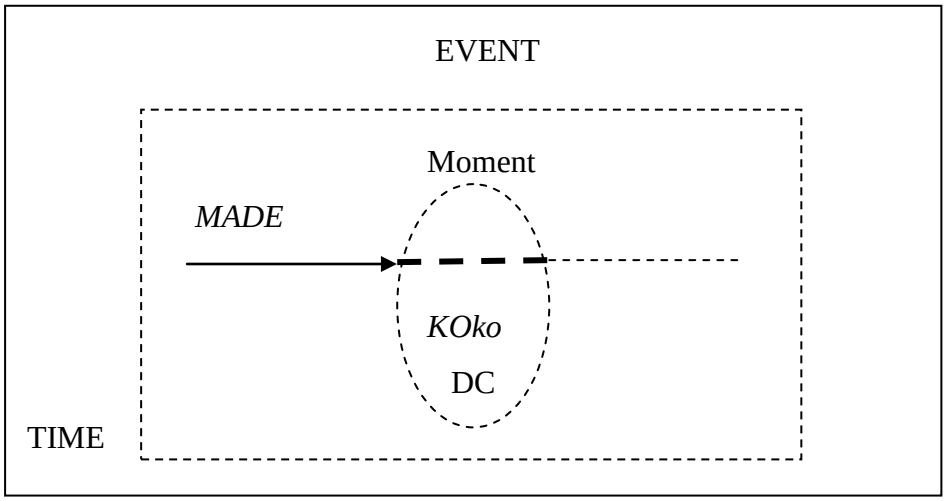


Figure (7.20): Profiling the TIME line by *KOko* with *MADE*

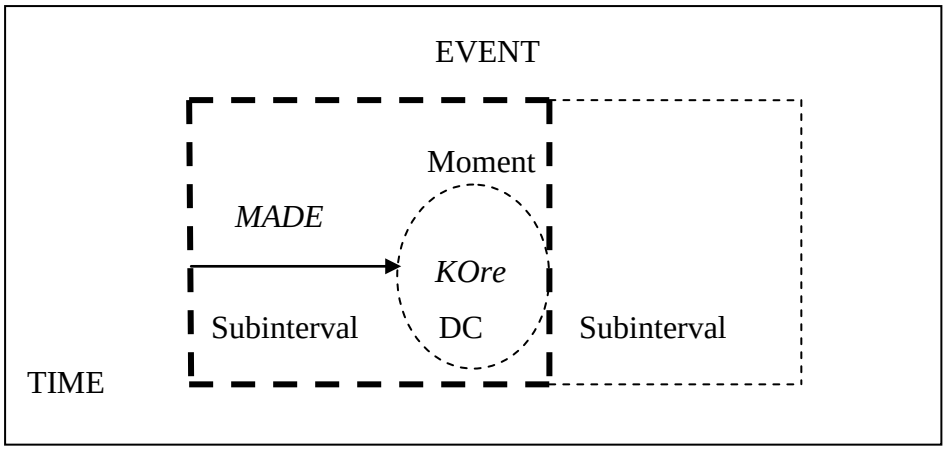


Figure (7.21): Profiling the TIME line by *KOre* with *MADE*

In both Figures (7.20) and (7.21), Anterior-durative *made* relates to the directionality of the PRESENT moment within the DC, and the *KO*-series becomes an anchor to the PRESENT moment. The *–ko* suffix can profile a PRESENT part of an EVENT interval, which is represented as a broken TIME line through the PRESENT moment, while the *–re* suffix creates a subinterval within an EVENT interval, which is depicted by the highlighted broken-lined box within the EVENT. These differences are motivated by the characteristics of PART (fuzzy boundedness and relationality) and of the *–re* suffix (boundedness) in their respective conceptualizations.

The above characteristics of the *–ko* and *–re* suffixes associated with an EVENT schema are typically reflected in the following expressions, which illustrate the middle point of an EVENT interval referred to by *koko* and the terminal point of a subinterval or an entire EVENT interval denoted by *kore*.

(46) **Koko made** kitara
KOko until if came
'Arriving at this point'
CAT

(47) Mohaya **kore made**.
No longer KOre until
'All is lost.'

In (46), *koko made kitara* strongly profiles the mid-point of an EVENT (normally, any point is possible from the middle to the near-end point). Therefore, *koko* cannot be substituted for *kore* in (46). On the other hand, *mohaya kore made* in (47) is employed precisely as the terminal point of an EVENT such as the end of life. Here, *kore* can be replaced by *koko*, if it is a terminal point of a sub-event within the still continuing EVENT.

With respect to construal alternatives among *ima*, *kore* and PART of *koko* with Anterior-durative *made*, the following example also supports the hypothesis presented above. The discourse situation in (48) is a scene in which a man called Meetee starts to join in the conversation with others.

(48) **Ima made** omoshirogeni gyooji kidoride kenbutsushiteita Meetee mo
now until interestingly referee pretend-LINK watching Meetee FOC
Hanako no ichigon ni kookishin o choohatsusareta mono to miete…
Hanako GEN a word DAT curiosity ACC stimulated COMP QUO look like
'For Meetee, who has been watching the situation like a referee until now, his curiosity appears to be stimulated by Hanako's words.'
CAT

In (48), *koko* and *kore* can replace *ima* with a contextually identical meaning with alternative construals. However, conceptual differences are obtained by profiling different facets of the TIME structure to designate the PRESENT moment of the EVENT. The representations of *KOko* and *KOre* were shown in Figures (7.20) and (7.21). The conceptualizations of *IMA* can be depicted as follows:

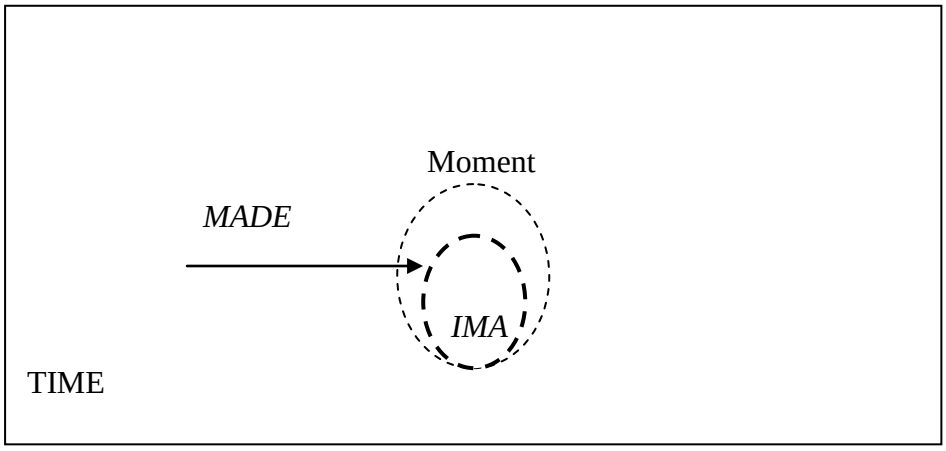


Figure (7.22): Profiling the TIME line by *IMA* with *MADE*

Comparing this Figure for *IMA* with Figure (7.20) for *KOko* and Figure (7.21) for *KOre*, only *koko* can profile the middle line within the PRESENT moment of the TIME line. Although both *ima* and *kore* can function as the terminal point of a state or an action, the difference between them is whether or not they can create a subinterval within an EVENT, where *ima* need not be conceptualized within an EVENT and profiles just a PRESENT moment of TIME.

Figure (7.22) also demonstrates the difference between *ima made* and *kore made* in terms of their sensitivity to the immediacy of the utterance time. The following example illustrates how *ima* can refer to the minimum moment of the TIME interval.

(49) **Ima ga ima** made majimeni haichooshite ita nda yo.
now GEN now until seriously listen to-LINK exist it is SF
'I have listened seriously to you until just this moment.'
CAT

Ima ga ima 'just this moment' is a written and classical style collocation (*ga* is the classical form of the genitive), while *ima no ima* is used in Modern Japanese. In this construction, *ima* can never be replaced by *koko* or *kore*. That is, the minimized extension of TIME can be designated only by *ima*.

7.3.5.2 *IMA*, *KOre* and PART of *KOko* with Posterior-durative *kara*

Based on the same cognitive characteristics observed with Anterior-durative, we can discuss construal alternatives among *ima*, *kore* and *koko* with Posterior-durative, which can be illustrated in the following example:

(50) (Watching a screen with a stop watch)
X: Sutoppu. {**Ima**/**Kore**/**Koko}** **kara** da. Jikan wa? [T and S]
stop now KOre KOko from COP time TOP
'Stop. It is from now on. What time is it?'

This example occurs in a flow of an EVENT, where *koko* seems to be the most appropriate expression to profile the mid-point of an EVENT interval. However, the crucial discourse factor for creating construal alternatives among temporal expressions is the preceding utterance ''*Stop*!'', by which the PRESENT moment can function as the beginning point of the next state or action and make *ima* and *kore* available to be used.

Compared with the mid-point of an EVENT interval expressed by *koko*, the use of *kore* in (50) indicates that the previous interval of the coding time is summarised as a subinterval and the new subinterval of an EVENT has begun. On the other hand, *ima* is employed to emphasize the PRESENT moment pragmatically in a strong manner. Let us represent the different profiling of a facet of the TIME line among the three expressions as follows:

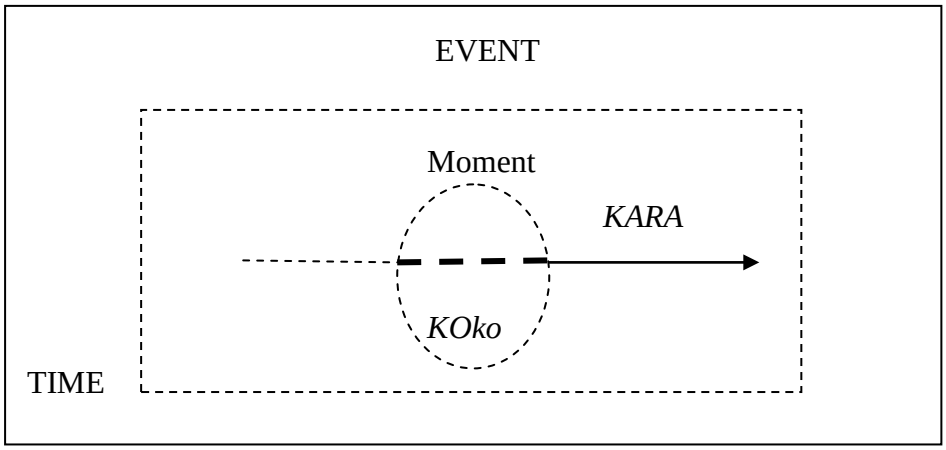


Figure (7.23): Profiling the TIME line by *KOko* with *KARA*

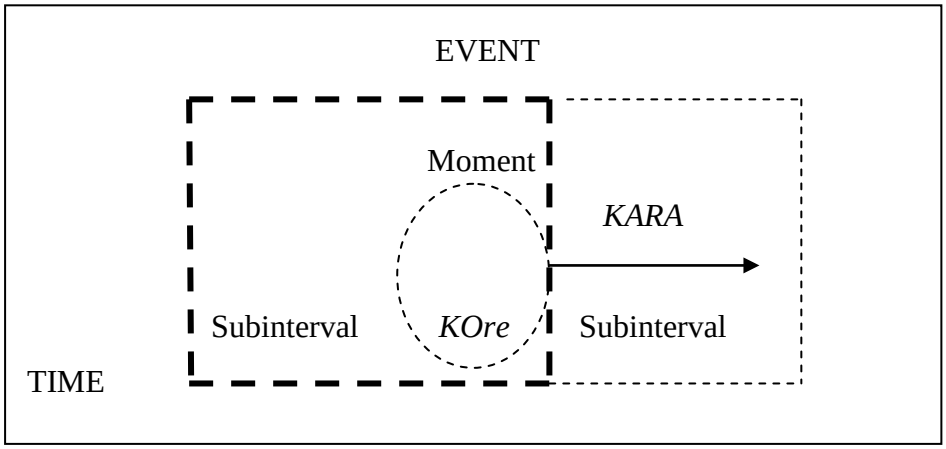


Figure (7.24): Profiling the TIME line by *KOre* with *KARA*

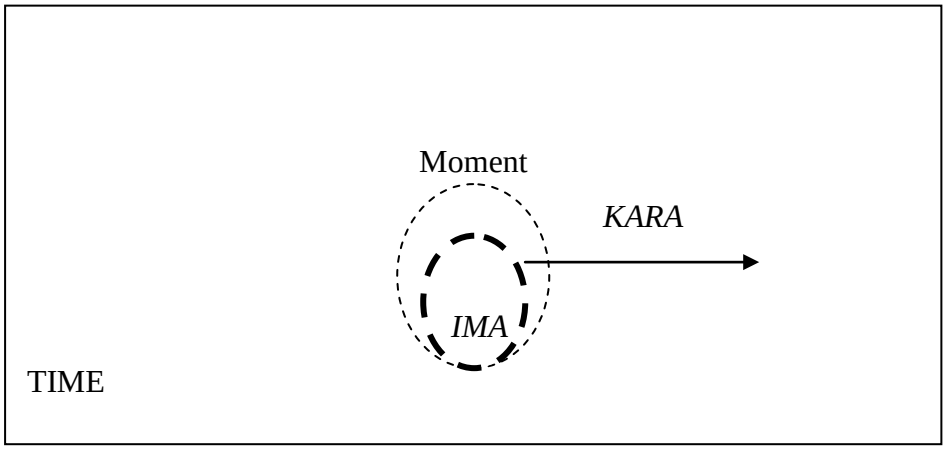


Figure (7.25): Profiling the TIME line by *IMA* with *KARA*

Comparing these three figures, *koko* is used in a conceptualization of TIME, profiling a momentary part within an EVENT interval (signified by the broken line through the speech moment) with Posterior-durative *kara*. The main characteristic of *kore* is to create a subinterval including the PRESENT moment, which is represented by the highlighted broken-lined square. The function of *ima*, on the other hand, is to profile the PRESENT moment regardless of an EVENT, which is the minimum moment of the utterance time represented by a smaller circle inside a broken-lined circle in Figure (7.25).

7.3.5.3 *IMA*, *KOre* and PART of *KOko* with Posterior-durative *kara* and Distance-future *saki* and Distance-past *mae*

This section will discuss several conceptual distinctions of *ima*, *kore* and PART of *koko* with Posterior-duratives *kara* in combination with Temporal distance expressions of the past *mae* and the future *saki*, which we can list with meanings of TIME as well as SPACE.

	Spatial	Temporal
Mae	front	before/earlier
Ato[30]	back	after/later
Saki	point/front	earlier
Saki	point/front	later

Saki can be used with the past and future meanings, depending on various phrasal and contextual conditions.[31]

Let us compare the following examples of the construction *ima*, *kore* or *koko* plus Posterior-durative *kara* plus TIME expression plus Distance-past *mae* or Distance–future *saki* (cf. Takeuchi 2007 and Taguchi 2010). They show three different conditions regarding their acceptability.

[30] The Chinese character of *ato* also has the alternate readings of *go* and *nochi*, which have the same meaning but different usages with other phrases and constructions.
[31]Concerning these conditions, see Iwasaki (2009).

(51) {**Ima**/**Kore/*Koko**} **kara** gojuu nen **saki**
now KOre KOko from fifty year later
'Fifty years from now/this time'

(52) {**Ima**/***Kore/*Koko**} **kara** gojuu nen **mae**
now KOre KOko from fifty year earlier
'Fifty years ago from now'

With Temporal distance expressions, *ima* can be used for the past and the future, *kore* only for the future and *koko* is not available in either example. We can explain these differences in terms of conceptual contrasts among *ima*, *kore* and PART of *koko*, which are motivated by three factors: (i) *ima* profiles the PRESENT moment itself, (ii) *kore* creates a subinterval within an EVENT interval, and (iii) PART of *koko* demands an EVENT schema. I will explain the construal differences of these three expressions in (51) and (52) by means of temporal image schemas in the TIME domain.

Firstly, let us examine the case of *ima* as follows:

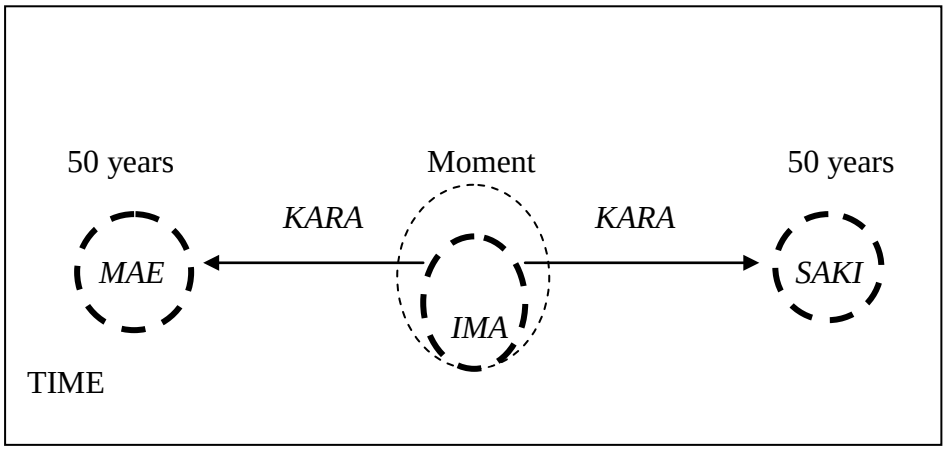


Figure (7.26): Profiling the TIME line by *IMA* with *KARA* and *MAE*/*SAKI*

It is clear that the facet of TIME profiled by *IMA* does not compete with any other profiling such as two directions from the PRESENT moment *KARA* and Temporal-future and –past of *MAE* and *SAKI*. Thus, *ima* can be used with *kara* plus TIME expression plus *mae* or *saki*.[32]

[32] Taguchi (2010) explains this phenomena based on an asymmetry of the directionality from the coding time of speech, where *kore* is uni-directional from past to future but *ima* is neutral, so that *ima* can be used for the past and the future. However, the directionality itself is always neutral, because it is the relationship between a reference point and other temporal expressions. For example, even the *KO*-series of *kore* and *koko* have a

Secondly, the unacceptability of *koko* in both examples (51) and (52) is based on the fact that an EVENT schema demanded by *koko* does not encompass the temporal distance expressions, where TIME plus *saki* and *mae* occur outside the EVENT schema.

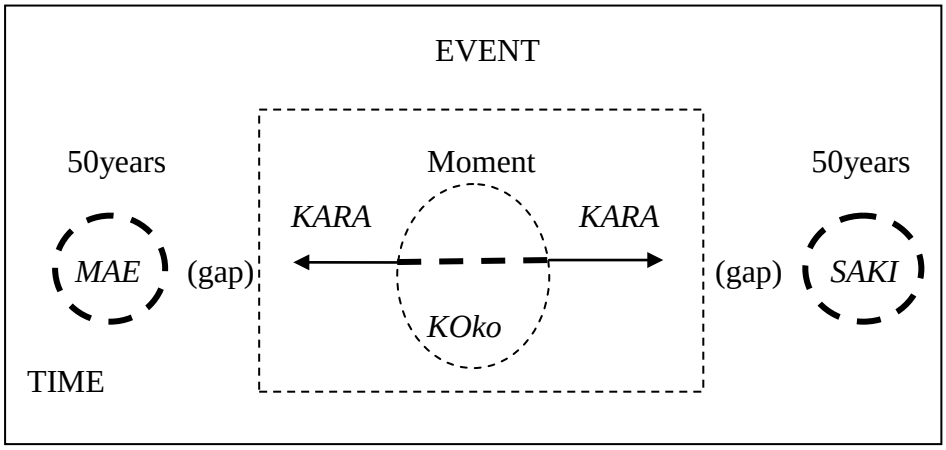


Figure (7.27): Profiling the TIME line by *KOko* with *KARA* and *MAE*/*SAKI*

Figure (7.27) shows that the temporal distance expressions *MAE* and *SAKI* are conceptualized outside the EVENT interval. Therefore, a profiling gap occurs between an EVENT interval needed by *KOko* and Temporal distance *MAE/SAKI*, because the relationality of PART of *koko* is only construed by the speaker's involvement in an EVENT.

Finally, let us discuss why *kore* is acceptable with the Distance-future *saki* but cannot be with the Distance–past *mae* . In the following Figures (7.28) and (7.29), we can recognize three different profiles of TIME intervals: *kore* for a subinterval, *kara* for directions, and *saki* and *mae* for the Temporal distance.

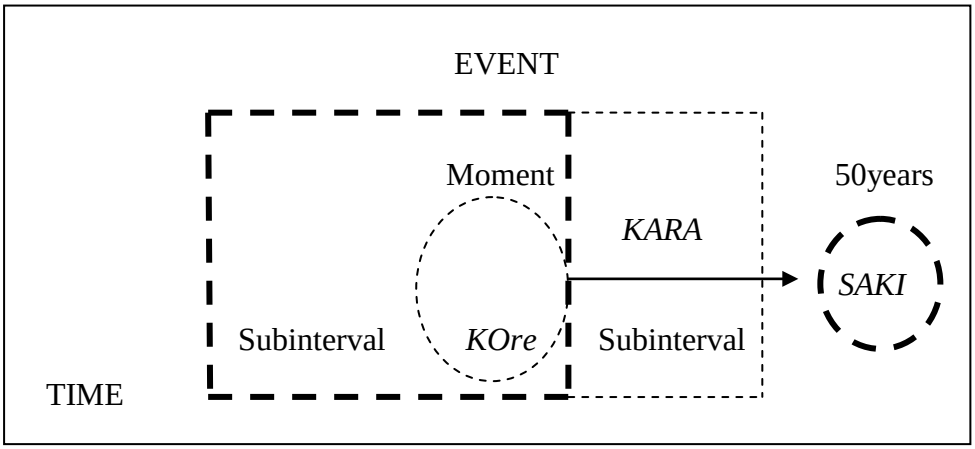


Figure (7.28): Profiling the TIME line by *KOre* with *KARA* and *SAKI*

potential directionality but cannot be directed in one way unless other temporal expressions are used, e.g. as seen in temporal adverbials *kono mae* 'a while ago' and *kono saki* 'a while later'.

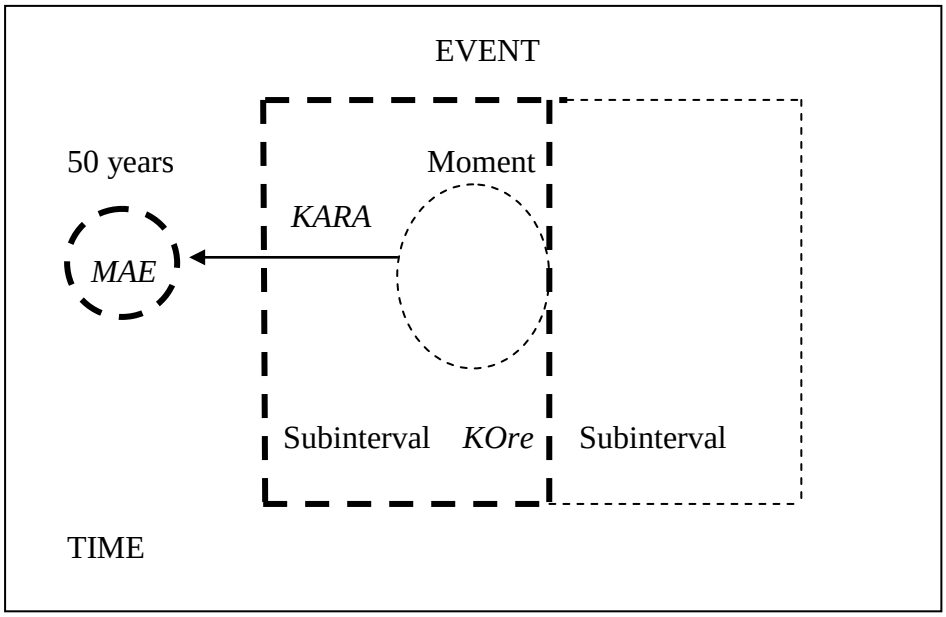


Figure (7.29): Profiling the TIME line by *KOre* with *KARA* and *MAE*

These Figures indicate that each expression can profile different facets of the TIME structure. It should be noted that the temporal use of *kore* creates a subinterval of an EVENT from the past to the present as a bounded past experience.

The crucial difference between them, which makes the *kore kara* TIME *mae* expression unacceptable, is the way to profile directions from the moment of the speech to the future and the past. In (7.31), the direction of *KARA* profiles the sequential duration from the **outside** of the subinterval of the EVENT to the FUTURE of *SAKI*, while the direction of *KARA* in (7.32) profiles the sequential duration from the **inside** of the subinterval of the EVENT to the PAST of *MAE*.

As explained in 7.3.4.1, the reason why both directions of *kara* have to start from the MOMENT of the speech is because a prototypical temporal profiling of the *KO*-series in the TIME domain is always anchored to the moment of an utterance (PRESENT) in the exophoric use. Therefore, when the sequential durative *KARA* is construed in the exophoric use with *KOre*, it is anchored to the speech situation and as a result, profiles the sequential duration between the PRESENT moment inside EVENT profiled by *KOre* and the temporal distance *MAE*.

In order to clarify this argument, firstly, the sequential durative *kara* is compared with another sequential durative *yori*. The Posterior-durative ***yori*** has almost the same meaning as *kara* but is employed in a more formal and written style than ***kara***. Combined with the sequential durative expression *yori*, *kore* is acceptable with the Distance-past *mae* as follows:

(52)' **Kore yori** gojuu nen **mae**
KOre from fifty year earlier
'Fifty years ago (from now)'

The difference between *kara* and *yori* resides in their pragmatic uses, where *kara* is employed in the exophoric use and *yori* is available for the anaphoric use (*yori* is acceptable in the exophoric use with the Distance-future *saki* as well as *kara*). Typical uses of *kore yori* TIME *mae* is found in historical narratives. A couple of examples are illustrated as follows (antecedents are underlined):[33]

(53) Kyonen juunigatsu no saiban de… kensatsugawa wa
last year December GEN trial on public prosecutor TOP
kore yori oyoso ich nen mae no kyonen ichgatsu ni…
KOre from about one year before GEN last year January in
'A public prosecutor on trial last December…In the last January which was about one year prior to this…'

(54) Tenpoo hachi (1837) nen no kure Yasuda Eesai wa Uenokurumazaka no
Tempoo eighth year GEN end Yasuda Eesai TOP Uenokurumazaka GEN
Hon-inboo ke doojoo ni tsuita…
Hon-inboo family training hall LOC arrive
kore yori roku nen mae, Tenpoo ni nen (1831) ni…
KOre from six year before Tempoo second year in
'At the end of 1837, Yasuda Eesai arrived at the training hall of the Hon-inboo family in Uenokurumasaka. In 1831, which was six years before this,...'

Kore in the first example refers back to a trial in the previous December and *kore* in the second instance has an anaphoric relation with the discourse referent, which is Yasuda Eesai's arrival at the end of 1837. The significant point is that *kore* in both examples does not include a present moment different from the exophoric use. That is, in the above two examples, the Posterior-durative *yori* is construed outside the EVENT profiled by *kore*.

[33] (53) is from the Blog *Hibitantan* 'even everyday', URL: http://asumaken.blog41.fc2.com/blog-entry-5151.html
(54) is from HP *Igoshikenkyuu* 'the study of Igo history', URL: http://www1.ocn.ne.jp/~igoshi/mono007.html

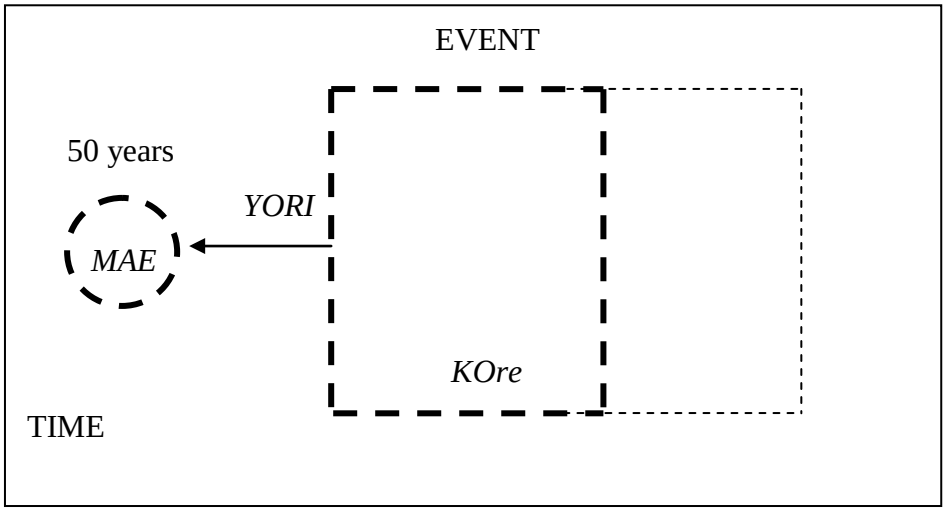


Figure (7.30): Profiling the TIME line by *KOre* with *YORI* and *MAE*

The arrow represented by *YORI* starts from outside the EVENT interval to the PAST-distance *MAE*. This observation is also supported by the fact that the Distance-future *saki* can occur with *kore* plus the Posterior-durative *kara*, which profiles outside the subinterval of EVENT profiled by *kore* in Figure (7.28).

From the examination above, we can hypothesize that the reason that *kore kara* cannot co-occur with *mae* for the Distance-past expression is as follows: although *KARA* has to profile the sequential duration between the **outside** of an EVENT and the temporal distance *MAE*, it cannot be realized, so that *KOre* inevitably profiles the sequential duration from the present TIME **inside** an EVENT owing to the exophoric use.

7.3.5.4 *IMA*, *KOre* and PART of *KOko* with Posterior-durative *kara* and Distance-future *saki*

This section will illustrate construal alternatives among temporal expressions with Posterior-durative *kara* in combination with Distance-future *saki* **within an EVENT interval**, prototypically motivating the use of *koko*. Observe the following example, a discourse situation in which the speaker (a cat in the novel) is abandoned and is looking for a place to live.

(55) Sate yashiki e wa shinobikonda monono **kore kara saki** dooshiteiika
well residence into TOP stole though KOre from later how to do
wakaranai.
not know
'Well, I was able to steal into the residence but I don't know what to do from now.'
CAT

In (55), as the situation is in the middle of an EVENT, *koko* is typically employed to designate a momentary part within an EVENT interval. However, the speaker can also use *kore* to create a subinterval in order to profile the PRESENT moment as the beginning point of the next subinterval of an EVENT. Let us depict the conceptual differences as follows:

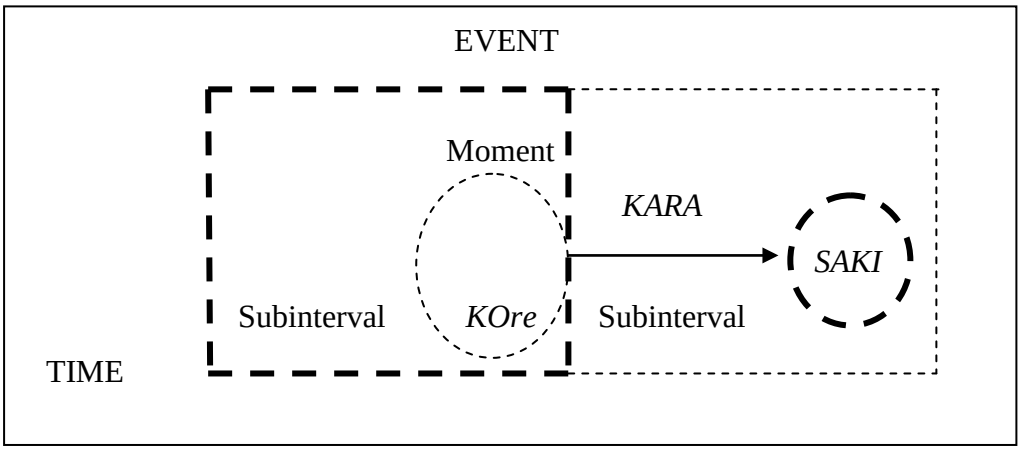


Figure (7.31): Profiling the TIME line by *KOre* with *KARA* and *SAKI*

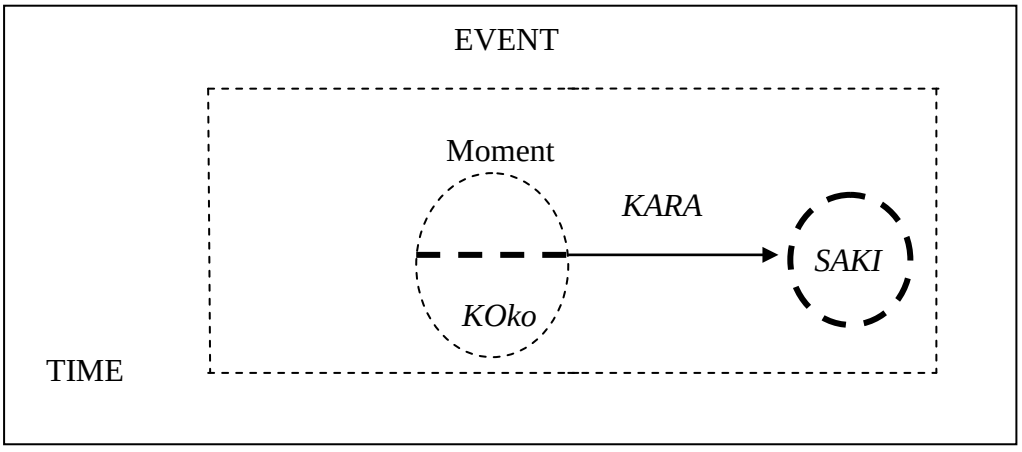


Figure (7.32): Profiling the TIME line by *KOko* with *KARA* and *SAKI*

The construal alternative between *kore* and *koko* is motivated by how the speaker conceptualizes an EVENT of the present situation, where, if the speaker construes that an EVENT is still continuing, *koko* is appropriate, while, if the speaker profiles the end of a period of one subinterval in an EVENT, *kore* would be preferable.

Interestingly, in this situation, *ima* can be used without *saki* but not with *saki*. Let us compare two patterns of temporal expressions with Posterior-durative *kara* and Distance-future *saki*.

(56) {***Ima*/*kore*/*koko*} *kara saki* dooshiteiika wakaranai.
now KOre KOko from later how to do not know
'I don't know what to do from now.'

(57) { ***Ima*/*kore*/*koko*} *kara*** dooshiteiika wakaranai.
now KOre KOko from how to do not know
'I don't know what to do from now on.'

In (56) and (57), *kore* and *koko* have contextually similar meanings both with and without Distance-future *saki*. The conceptual difference is that **without** *saki* only the PRESENT moment is profiled, whereas **with** *saki* the EVENT interval includes the FUTURE moment. Therefore, *ima* is acceptable without *saki* because of a non commitment to any EVENT interval as in (57), where *ima kara dooshiteiika wakaranai* implies that the speaker seems to be panicking and to have no idea about what to do **right now**. This is in contrast to the implications of *kore kara* and *koko kara*, where the speaker always thinks about the future within an EVENT.

Let us compare two cases of *ima kara* with or without *saki* as follows:

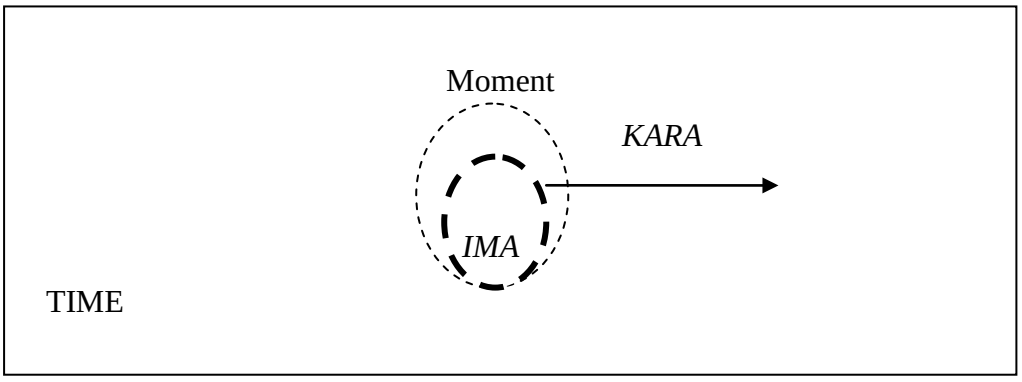


Figure (7.33): Profiling the TIME line by *IMA* with *KARA*

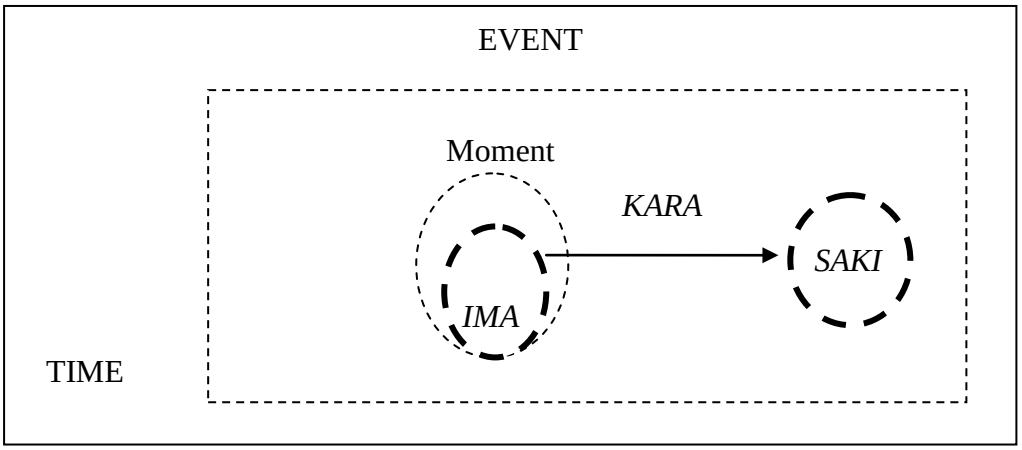


Figure (7.34): Profiling the TIME line by *IMA* with *KARA* and *SAKI*

A prototypical use of *ima* is to profile the PRESENT moment of the utterance regardless of an EVENT interval as explained in 7.3.5.1 and 7.3.5.2. Therefore, *IMA* in (7.32) is available, but, when *SAKI* represents the Distance-future within an EVENT as in Figure (7.33), *IMA* is difficult to use.

Whether or not *ima* needs an EVENT interval for the *kara saki* temporal expressions is also reflected in grammatical constructions. For example, we see that when *ima* is used outside an EVENT and does not grammatically modify the *saki* phrase, *ima* and *saki* can co-occur as in the following idiomatic expressions:

(58) {Ima kara} {saki ga} omoiyarareru.
now from later NOM be worried
'We are worried about the future from now.'

(59) {Ima kara} {saki no koto o} kangaete mo shikataganai.
now from later GEN thing ACC thing-LINK too there is no help
'It is no good thinking about the future from now.'

In examples (58) and (59), *ima kara* can co-exist with *saki*, but, since they are adverbial NPs, they have the same meanings even without *ima kara*. Furthermore, the two clauses could be rephrased as *ima kara omoiyarareru* and *ima kara kangaete mo shikataganai*, without the *saki* phrases. Both expressions are typically employed to emphasize the PRESENT moment as a new beginning for an EVENT rather than an interval within an EVENT. Therefore, it can be supposed that the cognitive explanation for whether or not *ima kara* is construed within an

EVENT helps to illustrate the grammatical fact that the phrasal constructions in which *ima kara* and *saki* co-occur are possible.

7.3.6 Conceptual contrasts and construal alternatives of FIELD of *KOko* with temporal extents

In the preceding sections, I focused on PART of *koko* as a temporal expression with sequential duratives. This section will deal with FIELD of *koko* encoding **temporal extents**. A basic construction denoting temporal extents in Japanese is: marker of periodical TIME plus *kan* 'interval', such as *niji**kan*** 'two hours', *nishuu**kan*** 'two weeks' and *ninen**kan*** 'two years'. *Kan* is a Sino-Japanese expression which originated from the Chinese pronunciation of a Chinese character. This same Chinese character of *kan* also has native Japanese pronunciations that also encode temporal extents, including *aida* and *ma* (as explained before, *ma* is assumed to be the *–ma* part of *Ima*). *Aida* can be part of complex temporal-extent constructions such as *shibaraku no aida* 'for a while' and *toobun no aida* 'for the time being'.

7.3.6.1 FIELD of *KOko* with *shibaraku, toobun* and *saikin*

As hypothesized in 7.3.4.1, FIELD of *koko* as a temporal expression competes conceptually with *ima* and therefore cannot designate a TIME interval as a simple temporal expression, but always functions **as part of a complex expression**. Let us map FIELD of *koko* from the domain SPACE to TIME.

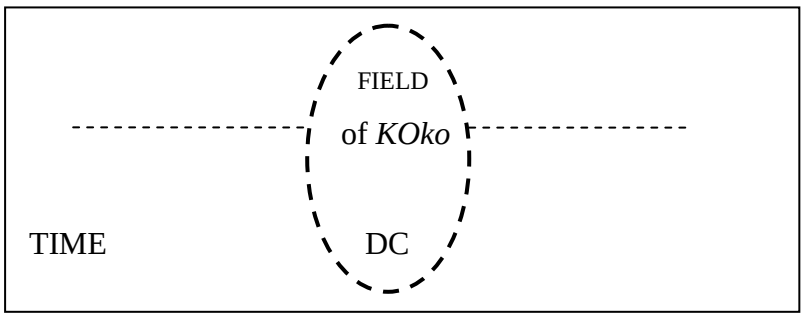


Figure (7.35): The conceptualization of FIELD in TIME

The significant characteristics of FIELD in SPACE are ‘‘**zero distance**’’ and ‘‘**no pointing**’’, which remain topologically in the TIME domain according to the ‘‘invariance principle’’. Thus, FIELD in TIME loses potential DIRECTIONALITY from the TIME line different from the basic TIME line of the *KO*-series in Figure (7.13) and PART of *koko* in Figure (7.16).

Next, I will demonstrate FIELD of *koko* as a temporal expression with temporal-extent adverbials such as *shibaraku* ‘while’, *toobun* ‘while’, and *saikin* ‘recently’. Temporal extents in Japanese are signified by zero-marking for Atelic-extent and the *de* postpositional particle for Telic-extent.[34] The three temporal expressions above are all Atelic-extent. They have a different sensitivity to the future interval and past interval, which is illustrated as follows:

(60) a. Shibaraku attenai.
while have not seen
‘I have not seen (person) for a while.’
b. Shibaraku awanaitsumori da
while will not see COP
‘I will not see (person) for a while.’

(61) a. *Toobun attenai.
while have not seen
‘I have not seen (person) for a while.’
b. Toobun awanaitsumori da
while will not see COP
‘I will not see (person) for a while.’

(62) a. Saikin attenai.
recently have not seen
‘I have not seen (person) recently.’
b. *Saikin awanaitsumori da
recently will not see COP
‘I will not see (person) recently.’

[34] Following Frawley (1992), this thesis defines a telic/atelic distinction in the following way. Telic-extent is associated with Resultative and Accomplishment of an EVENT within a TIME interval, and otherwise it is Atelic-extent. In Japanese, zero-marking Atelic extent can be exemplified in *isshuukan-Ø isogashikatta* ‘I have been busy for a week’ and Telic-extent with *de* postpositional particle can be as *isshuukan de owarimashita* ‘I finished it in a week’.

The three temporal expressions possess the shared property of **APPROXIMATION of TIME interval** including the utterance time, based on the fact that the temporal extent denoted by them is flexible, ranging from days to years depending on the context. Semantic differences between the three expressions are that *toobun* 'while' denotes TIME interval of the future, *saikin* 'recently' TIME interval of the past and *shibaraku* 'while' both the past and future. FIELD of *koko* can co-occur with all three expressions in appositional relations as follows:

(63) **Koko shibaraku** wa nihon o hanarenai yotee desu. [M]
KOko while TOP Japan ACC not leave plan COP
'I'm planning not to leave Japan for a while.'

(64) Ame wa **koko toobun** wa furanai desho [M]
rain TOP KOko while TOP will not rain COP-probable
'It shall not rain for a while'

(65) Ame wa **koko saikin** wa furimasen deshita.
rain TOP KOko recently TOP did not rain COP
'It has not rained recently.'

In the examples above, the temporal meanings of *koko shibaraku, koko toobun*, and *koko saikin* reside in *shibaraku, toobun* and *saikin*, and not in *koko*. Although *koko* has been categorised as a temporal expression (Takahashi and Suzuki 1989 and Morita 1989), the three utterances have the same contextual meaning with and without *koko*, and using *koko* alone cannot express the temporal meaning. As a result, temporal meanings of *koko* as FIELD are phrasal and additional.

With respect to temporal extents (*toobun, saikin* and *shibaraku*), *ima* and *kore* cannot appear in these temporal phrases except for *ima shibaraku* which I will explain in Figure (7.38). Firstly, I propose that the difference between *kore* and *koko* in appositional relations with *shibaraku, toobun* and *saikin* is in the semantic associations:

[*KO-* *-re*]
DIRECTIONALITY bounded THING
PROXIMITY of DC + *shibaraku, toobun* and *saikin*]
temporal APPROXIMATION

[*KO-* *-ko*]
Zero DISTANCE fuzzy bounded FIELD
PROXIMITY of DC

The concepts of *KOko* are Zero DISTANCE and fuzzy BOUNDEDNESS, which are not in competition with the temporal APPROXIMATION of TIME intervals in *shibaraku*, *toobun* and *saikin*. In contrast, *KOre* semantically consists of DIRECTIONALITY and BOUNDEDNESS, which competes with the temporal extents and APPROXIMATION of *shibaraku*, *toobun* and *saikin*. The case of *ima* can be explained as profiling the PRESENT moment, which competes with the relatively longer intervals designated by *toobun* and *saikin* (typically more than one day).[35]

Considering the conceptual role of FIELD of *koko*, we can describe it in terms of a different way of profiling TIME intervals with or without *koko*. For instance, the case of *shibaraku* can be illustrated as follows ((66) to (70) taken from Google search results):[36]

(66) **Shibaraku** kyuusai no oshirase.
while non-publication GEN notice
'The notice of non-publication for a while'

(67) Fukkyuu ni **shibaraku** jikan ga kakarimasu.
recovery for while time NOM take
'It will take a while to recover.'

[35] On the other hand, *shibaraku* has a wider range of TIME intervals such as in the idiomatic expression *shibaraku shite* 'after a while', which can refer to TIME from minutes to months.
[36] As the examples of *shibaraku* in (66) to (70) are very common phrases and it is not necessary to understand their contexts from the Blog or HP titles, I will just note their URLs.
(66) : http://blog.esuteru.com/archives/2915187.html
(67) : http://b.hatena.ne.jp/articles/201104/3758
(68) : http://pon.blogstation.jp/archives/1564163.html
(69): http://blogs.dion.ne.jp/hobbyken/archives/10175118.html
(70): http://twitpic.com/4kilcb

In (66) and (67), *koko* cannot occur in an appositional phrase with *shibaraku*, because the two examples of *shibaraku* above profile a future interval, rather than the PRESENT moment. On the other hand, in the following examples, the use of *koko* is motivated to emphasize the PRESENT moment for EVENTs.

(68) **Koko shibaraku** no hoodoo
KOko while GEN news
'Recent news'

(69) **Koko shibaraku** de omotteita koto
KOko while in thinking COMP
'What I have thought recently,'

(70) **Koko shibaraku** ni nai hodo
KOko while at not exist degree
'To a degree not experienced for a while'

In examples (68) to (70), *shibaraku* cannot be used without *koko*, because these three expressions profile the TIME interval that includes the PRESENT moment. Let us depict them in diagram form.

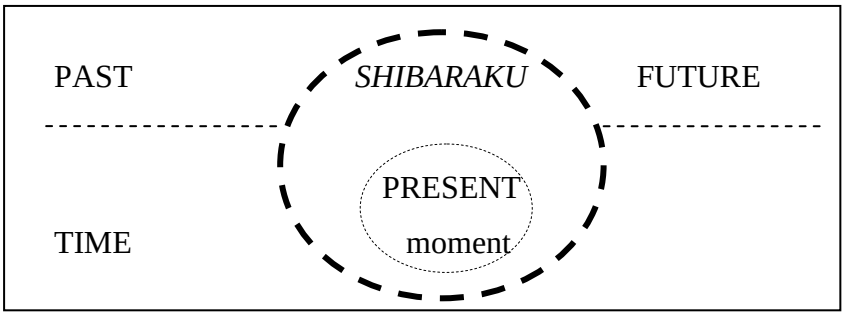


Figure (7.36): The conceptualization of *SHIBARAKU* without FIELD of *KOko*

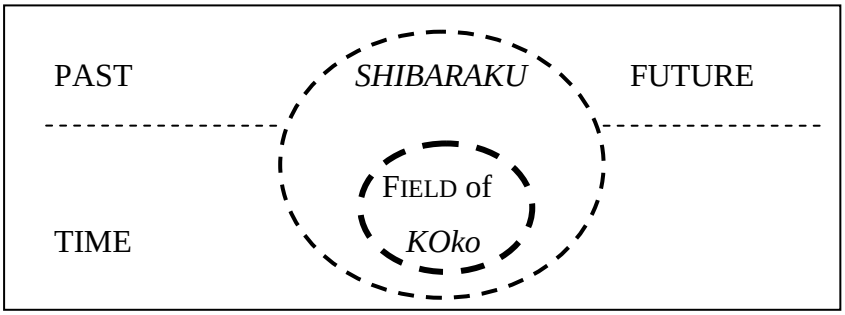


Figure (7.37): The conceptualization of *SHIBARAKU* with FIELD of *KOko*

Without FIELD of *koko*, the speaker construes a TIME interval with less awareness of the PRESENT moment, while FIELD of *koko* profiles the PRESENT moment together with the TIME interval denoted by *shibaraku*. In other words, FIELD of *koko* is considered to be used for profiling inclusiveness of the deictic centre (utterance moment).

A construal alternative for FIELD occurs with *ima*. *Ima* can also be phrasal with *shibaraku* having the form *ima shibaraku* 'for a while'. The typical expression is:

(71) **Ima shibaraku** omachi kudasai
now while wait please
'Please wait a little longer.'

(71) indicates an interval that is relatively shorter (within a few minutes) than referred to by *koko shibaraku*. In this context, *koko* cannot replace *ima*, which means that this is not a construal alternative. Let us represent FIELD of *koko* and *ima* with the temporal expression *shibaraku*

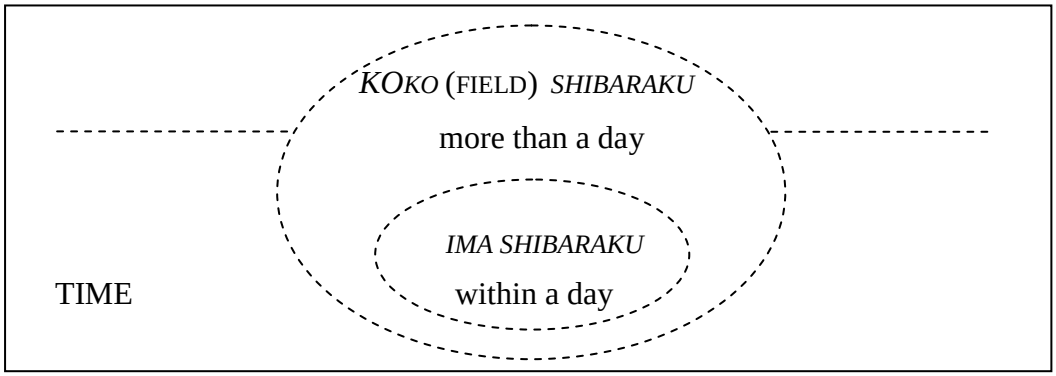


Figure (7.38): Conceptual difference between FIELD and *IMA* with *SHIBARAKU*

Typical uses of *ima shibaraku* 'for a while' refer to an interval within a day, while *koko shibaraku* designates an interval of more than a day. Hence, FIELD of the *–ko* suffix cannot have a construal alternative with *ima*, but we can still describe a conceptual contrast between them.

7.3.6.2 Construal alternatives between FIELD of *KOko* and *KOno* NP with temporal extents

Before presenting examples and analysis, let us confirm some syntactic differences between FIELD of *koko* and *kono* NP as temporal expressions:

[*KOko* + temporal-extent]	[Noun +Noun]
[*KOno* + temporal-extent]	[Determiner +Noun]

KOko is in an appositional relation with markers of temporal extents as seen in the last section, while the *KO*-series *kono* NP modifies temporal extent expressions. This morpho-syntactic difference is reflected in a slight conceptual distinction between them. For example, an appositional relation signifies a similarity of the conceptual statuses of two entities, whereas a determiner carries additional concepts that modify an entity. Temporal extent in both expressions is realized by zero-marking for Atelic-extent and by the *de* postpositional particle for Telic-extent. Let us observe a construal alternative involving *koko* and *kono* with temporal extent.

(72) {**Koko/Kono}** **isshuukan** toyuu mono wa neta kiri deshita. [M]
KOko/KOno one week called COMP TOP laid just COP
'He has been in bed for around one week.'

In this example, since *koko* and *kono* with Atelic-extent have a contextually identical meaning, it is very difficult to point out their different characteristics. However, the following example shows the unique characteristics of *koko* with Atelic-extent.[37]

[37] (73) is taken from the Blog *Bibbi no yuuutsu* 'melancholy of Bibbi'. URL: http://ritsu0120.blog84.fc2.com/blog-date-20091127.html

(73) Yatte shimaimashita. Infuruenza. Jitsuwa kayoobi kara
do-LINK have finished flu in fact Tuesday from
koko isshuukan zutto gakkoo o yasundeorimashita.
KOko a week throughout school ACC have taken a rest
'I have got the flu. In fact, I have been away from school since Tuesday this week.'

In (73), the speaker took a rest from school from Tuesday to Friday, but, she uses the temporal extent expression *isshuukan* 'for a week' for four days of a week with FIELD of *koko*. Prototypically, *kono* plus a temporal extent expression designates a precise period of time. For example, *kono isshuukan* means exactly seven days of a week, while *koko* plus a temporal extent expression can refer to approximate TIME intervals such as an approximal week of five days to nine days. Let us represent this difference between *koko* and *kono* in temporal extent constructions in the TIME domain.

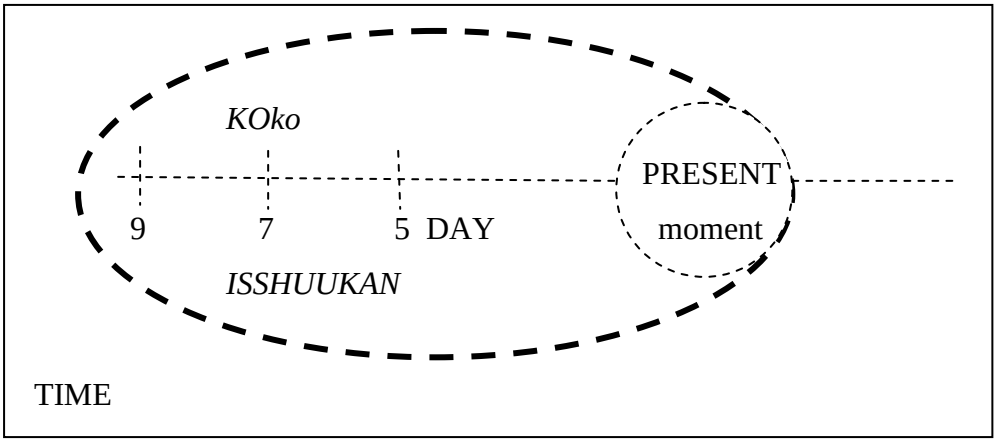


Figure (7.39): The conceptualization of *ISSHUUKAN* with FIELD of *KOko*

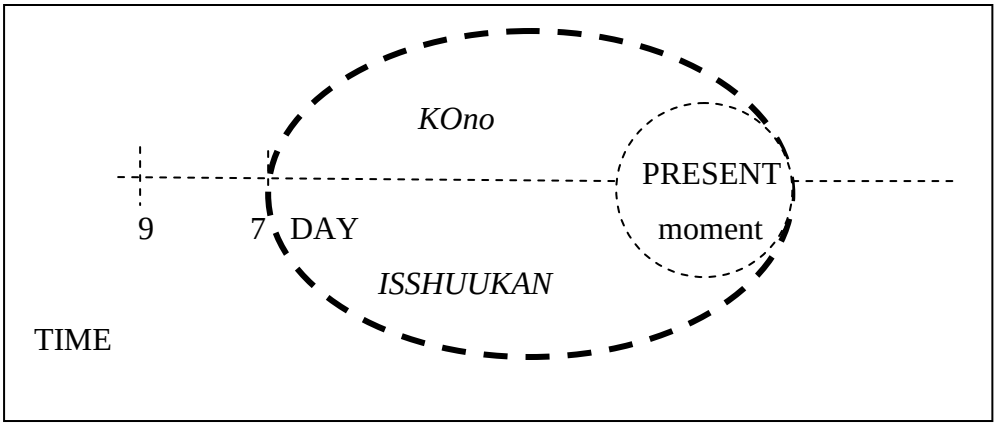


Figure (7.40): The conceptualization of *ISSHUUKAN* with *KOno*

By comparing the two Figures, we can see the difference in profiling facets of TIME intervals, for the two expressions. *Koko* can profile the TIME extent of an approximate number of days of a week, while *kono* with *isshuukan* profiles exactly seven days of a week for an accurate TIME extent. It is conceivable that the characteristics of **APPROXIMATION** in *koko* with a temporal extent are motivated by the **fuzzy boundedness** of FIELD of *koko*. On the other hand, *kono* functions as a determiner of a temporal extent, so that the interval of TIME extent tends to be strict.

Concerning approximate temporal-extent expressions such as *suu jikan* 'several hours', *suu shuukan* 'several weeks' and *suu kagetsukan* 'several months', the following interesting tendency is observed, based on Google search results[38]:

koko several hours (566) against *kono* several hours (630)
koko several days (669) against *kono* several days (680)
koko several weeks (684) against *kono* several weeks (690)
koko several months (600) against *kono* several months (629)

There is no significant difference of frequency amongst the above expressions. However, with the expression 'several seconds', there were 551 examples of *kono suu byookan* 'these several seconds', while *koko suu byookan* 'these several seconds' had only **three** examples. This demonstrates that *kono* with temporal-extent expressions can designate a shorter interval of TIME than *koko* with temporal-extent expressions.

Contrary to APPROXIMATION of *koko* with a temporal extent, *kono* with a temporal extent tends to show the counter-property **PRECISION**. For example, we can observe a difference between *koko* and *kono* with Atelic- and Telic-extent in terms of PRECISION by means of employing an odd number in an account of time, such as thirteen seconds, minutes and hours. In Google search results,[39] a simple pragmatic distribution with *koko/kono* plus 13 *byookan* 'seconds', *fun kan* 'for minutes' and *jikan* 'hours' can be seen as in the following

[38] The way I have extracted the number of results in the Google searches is (1) using an advanced search with ''this exact wording or phrase'', (2) checking the final page of results and pressing ''repeat the research with the omitted results included'', and checking the final page again and counting the number of hits. This method shows more accurate numbers than simple search results, e.g., *koko suu ji kan* (21,100,000) and *kono suu ji kan* (4,250,000) found only in the first step of searching.
[39] Google search results are not entirely reliable. Therefore, I employ these in order to observe broad frequency differences in the use of different expressions. However, the results are not taken as evidence in themselves, but viewed as adding support to certain hypotheses developed on the basis of other evidence.

numbers of their usages (Telic-extent with the *de* postpositional particle in brackets): PRECISION

	KOko		*KOno*	
For 13 seconds	0		45	(6)
For 13 minutes	2	(2)	112	(5)
For 13 hours	52	(0)	216	(10)

A punctual and relatively short period of TIME such as 13 seconds and 13 minutes competes with APPROXIMATION features of FIELD of the *–ko* suffix. Thus, in such contexts, the speaker prefers *kono*. Although the temporal extent 13 hours allows more frequent use of *koko*, this is probably because 13 hours can be construed within a relatively longer TIME interval than 13 seconds and 13 minutes.[40]

The characteristic of PRECISION is related to Telic-extent through the signalling of the result and accomplishment of EVENT within a TIME interval. Let us illustrate the differences between *koko* and *kono* with Telic-extent in the following examples from Google search results.

(74) Zettai {**koko/kono**} isshuukan de
absolutely KOko KOno a week TELIC
'Absolutely this week '

(75) {**koko/kono**} isshuukan de kanseeshita
KOko KOno a week TELIC accomplished
'I accomplished it this week.'

[40] An example of *koko juusampunkan* 'these thirteen minutes' is as follows:

(i) **Koko juusampunkan** zutto miteru wa
KOko thirteen minutes throughout watching SF
'I kept watching it for these 13 minutes.'

This comes from Twitter *Dream Theatre* , URL: http://www.nicozon.net/msg/sm258120

As a representative example for *koko juusan jikan* 'these thirteen hours',

(ii) Akusesu ga **koko juusanjikan** ni shuuchuusiteimasu
access NOM KOko thirteen hours LOC concentrating
'Access to the HP has been concentrated on these thirteen hours.'

This comes from HP [61°c], URL:
http://homepage2.nifty.com/61degrees/ramble/2005/09/concentration.html

(76) {**koko/kono**} isshuukan de owari-{mashita/ninaru/nano etc.}
KOko KOno a week TELIC end- PAST/ become/ it is
'I {accomplished/will accomplish/etc.} it this week'

In the first example, the adverbial phrase *zettai* 'absolutely' reinforces the PRECISION of the week with Telic-extent. In this search, *koko* is found in **no cases** and *kono* in **two cases**. The second example using the verb *kanseesuru* 'accomplish' contains *koko* in **two cases** and *kono* in **fourteen cases**. In the third example, I use the non-finite verb *owari* 'end' and make it into various predicates such as *owari-mashita* 'ended' and *owari-ninaru* 'become to end'; these yielded *koko* in **only one case** and *kono* in **thirty four cases**. Although the degree of difference in use between *koko* and *kono* is relatively small, it can be hypothesized that *kono* with temporal extent typically possesses the characteristic of PRECISION.

In other words, APPROXIMATION of FIELD with a temporal expression competes with PRECISION with Telic-extent, and this supports some remarks in Langacker (1987) and Frawley (1992) where it is suggested that ''perfective'' is associated with ''bounded'' and ''imperfective'' with ''unbounded''. That is, the fuzzy boundedness of the *–ko* suffix could motivate the speaker to construe APPROXIMATION of TIME and to use *koko* with Atelic-extent.

Finally, let us examine one more Atelic-extent expression with *tokoro* phrases as introduced in 7.3.3. Prototypical constructions for temporal extent expressions of *koko* contain a TIME expression in an appositional relationship such as *koko shibaraku* and *koko isshuukan*. However, *koko no tokoro* is the only adjectival temporal phrase which uses the genitive case *no*. The construction of a deictic expression (*ima, koko* or *kono*) plus a genitive *no* plus *tokoro* 'place' indicates temporal extent as follows:

(77) Shigoto no chooshi wa doo desu ka. [T]
job GEN condition TOP how COP Q
'How is your job going?'
{**ima no**/ **kono**/ **koko no**} **tokoro** wa.
now GEN KOno KOko GEN TOKORO TOP
'It is good.'

All three expressions are used with almost the same meaning in the context when discourse participants have not seen each other for a while. As pointed out in 7.3.3, *ima no tokoro* has

the pragmatic implication of ‘‘so far so good, but we don’t know about the future’’, which is not present with *koko no tokoro* and *kono tokoro*. In addition, when asked ‘‘how is it going’’ within the interval of an hour or a day, only *ima no tokoro* is acceptable, which means that the TIME interval of *ima* can be the minimum temporal extent. We can also observe the difference of *ima no tokoro* from *kono tokoro* and *koko no tokoro* in the following example, which is a conversation between an old lady and a woman named Aomame. They use temporal extent *tokoro* phrases with *koko* and *ima* respectively.

(78) ‘**Koko no tokoro** taichoo wa ikaga desu ka’ to rooba ga
KOko GEN TOKORO physical condition TOP how COP Q QUO old lady NOM
tazuneru. **Ima no tokoro** subete wa mondai naku shinkooshiteiru
ask now GEN TOKORO everything TOP problem not exist in progress
to Aomame wa kotaeru.
QUO Aomame TOP answer
‘The old lady asked, ‘How are you these days?’. Aomame answered that everything is going fine without problems so far.’
1Q84 book 3 (p277)

In the first utterance, the old lady asks Aomame about her health condition using *koko no tokoro*, for which *kono tokoro* could be substituted, but *ima no tokoro* could not. In other words, as a question utterance, the phrase *ima no tokoro* is pragmatically inappropriate.

Interestingly, if the speaker has not had any contact with the hearer for a very long time, the following utterance sounds very awkward.

(79) Hisashiburi. {***Koko no/*Kono}** **tokoro** taichoo wa?
long time no see KOko GEN KOno TOKORO health condition TOP
‘Long time no see. How’s it going recently?’

In this situation, the speaker cannot use either *koko no tokoro* or *kono tokoro* to ask about the hearer’s health. That is, the question with temporal extent *tokoro* presupposes that the speaker has recent information about the hearer. This pragmatic restriction is motivated by the fact that the inclusiveness of the deictic centre of FIELD of *koko* and the proximity of the *KO*-series of *kono tokoro* compete with each other when referring to long intervals of a particular discourse situation from the utterance time in the deictic centre.

As far as the distinction between *koko no tokoro* and *kono tokoro* is concerned, I have not found any difference between them in any context.[41] The reason for their semantic equivalence can be explained at several levels, namely those of phonology, morphology, and semantics. One simple hypothesis, based on the phonological and morphological similarity of *koko no* and *kono*, is that *kono* reflects omission of the *–ko* suffix from *KO(ko) no tokoro* or, conversely, that *koko no* reflects the insertion of the *–ko* suffix between the *KO*-series and the attribute *–no*. From this point of view, their difference is explicable in terms of a stylistic variation of the same form.

From a semantic point of view, we can explain their equivalence with respect to their original conceptual meanings, which we can signify as follows:

[*KO-*	*-ko*]	+ *no*		
PROXIMITY of DC	PLACE (FIELD)	ATTRIBUTE		
			+	[*tokoro*]
				PLACE
[*KO-*		*-no*]		
PROXIMITY of DC		ATTRIBUTE		

That is, although the only morphological difference between the two forms is the *–ko* suffix, its original conceptual meaning of PLACE is the same as the conceptual meaning of *tokoro*. As a result, the meaning PLACE of the *–ko* suffix and of *tokoro* can be semantically assimilated. In other words, we can indicate a conceptual contrast between *koko no tokoro* and *kono tokoro* at the morphological level (with or without the *–ko* suffix), but this is not reflected in their conceptual realizations in discourse.

Considering the motivation for assimilation of conceptual meanings between PLACE of the *–ko* suffix and PLACE of *tokoro* phrases, *tokoro* phrases are different from other temporal extent expressions such as *shibaraku, toobun* and *saikin*. The latter three expressions can be used as simple temporal expressions, while *tokoro* must be used in a complex expression for TIME. Therefore, the phrasal compositions of *koko no tokoro* and *kono tokoro* are quite strongly tied together as lexical units, which could cause the conceptual assimilation of PLACE.

[41] I also investigated *kono tokoro* and *koko no tokoro* in Google searches but have not found any particular difference between them; they are interchangeable without the slightest change of meaning.

Consequently, we can summarize the difference between *koko* and *kono* with temporal extents in each pair of expressions: (i) when *koko* and *kono* combine with temporal extent expressions such as *isshuukan* 'a week', *koko* tends to be used for APROXIMATION and *kono* for a strict interval and PRECISION, (ii) when they combine with an expression referring to a short period of time such as *suubyookan* 'several seconds', *kono* is preferable, (iii) *kono* TIME expression tends to be used with Telic-extent *de* more frequently than *koko* is, and (iv) combined with *tokoro* phrases, they have conceptual contrasts but do not show any semantic difference in utterances because of the semantic assimilation of the *–ko* suffix and *tokoro* in terms of PLACE.

7.3.7 LOCATION of the *–ko* suffix as FUTURE and PAST in the EXOPHORIC use

In the final examination of temporal expressions in the EXOPHORIC use, I will discuss the *–ko* suffix as FUTURE LOCATION and PAST LOCATION. The main characteristic of LOCATION of the *–ko* suffix is that it does not intersect with the deictic centre. This can be mapped onto the TIME domain and represented as follows:

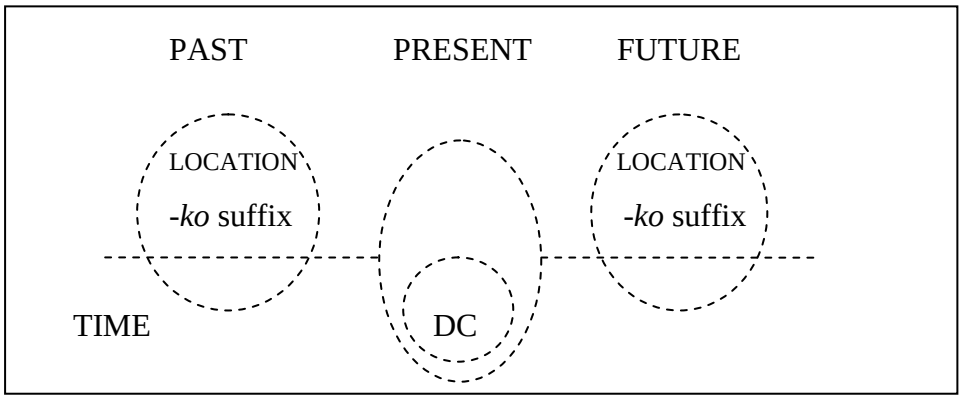


Figure (7.41): The conceptualization of LOCATION in TIME

In the discussions of PART and FIELD of the *–ko* suffix as temporal expressions, the DC is always involved, so that their pragmatic use is always exophoric. However, the pragmatic use of LOCATION of the *–ko* suffix as a temporal expression must extend the pragmatic use to the **EXOPHORIC use** (including the recognitional use) because of the separation from the DC.

Generally, the *–ko* suffix as a temporal expression is considered to occur only with the *KO*-series (Morita 1989). However, the *SO*-series and the *A*-series can also be used as temporal expressions. Let us illustrate *soko* with Anterior-durative *made* for the future TIME in the following example.

(80) Hikuku tarekometa buatsui kumo ga, sugu **soko** **made** sematta
low hanging thick cloud NOM immediate SOko until be near
kibishii fuyu o yokokushiteita
severe winter ACC be predicting
'The low and heavy clouds told us that a severe winter would be coming immediately.'
WORLD

This use of the *SO*-series as a temporal expression is a typical TIME MOVING metaphor, where the winter is approaching the speaker (TIME is coming). Compared with the *SO*-series of PART seen in (44) and (45) of 7.3.5.1, which is relevant to the PERSON contrast, the *SO*-series in (80) relates to the DISTANCE contrast, which is neither close to nor far away from the DC. Let us depict *SOko* with Anterior-durative *made* in (80) in the TIME domain as follows:

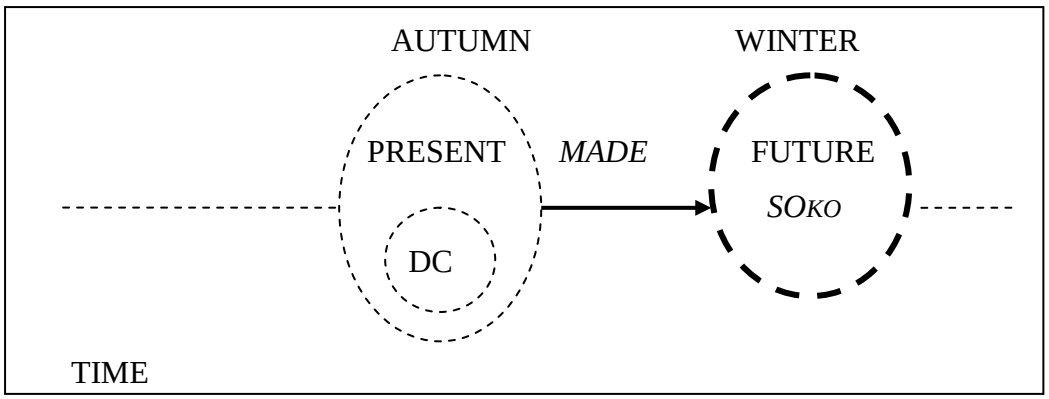


Figure (7.42): The conceptualization of LOCATION with *SOko MADE* in TIME

Here, *soko* in (80) is used for a temporal expression related to the season WINTER. We can find this type of expression in the structure of a temporal expression plus *soko* plus Anterior-durative *made* plus *sematteiru* 'be drawing near', as in the following example.

(81) Yakusoku no jikan ga **soko** made sematteiru.
appointment GEN time NOM SOko until being near
'The time of the appointment is drawing near.'

In (80) and (81), *soko* is used to refer to an indefinite point of time in FUTURE. In these phrases, it is true that *ima* and *sore* cannot be substituted for *soko*, since the indefinite FUTURE LOCATION of *soko* is separated from the PRESENT of the DC, which is not consistent with the profiling of the PRESENT of *ima* with the DC and the PAST subinterval including the DC created by *sore*.

Now, let us demonstrate the use of *asoko* for the PAST temporal expression. As presented in 3.2.2, the *A*-series is recognized as signalling the speaker's direct experience including shared knowledge of the discourse participants (Kuno 1973 and Kinsui and Takubo 1997), which motivates the PAST meaning of the *A*-series. This is because the speaker's direct experience always takes place in the PAST. Thus, we can reanalyze *asoko* as [PAST LOCATION] analogous to that of *koko* as [PRESENT FIELD] of the DC. The following discourse exemplifies a typical use of *asoko* as a Temporal-past expression in the discourse participants' reflections, such as after a sports game.

(82) Berugii sen no ato de mo rokkaaruumu de senshudooshi ga
Belgium game GEN after at FOC locker room LOC teammates NOM
''**Asoko** de rain o ageru njaa nee yo '' to yuu yoona kaiwa
ASOko at line ACC push up it is not SF QUO say like conversation
o shiteita.
ACC was doing
'Even after the match against Belgium, the teammates were saying things in the locker room, like 'don't push up the defence-line' '
Yamamoto Masakuni bibooroku (p265)

In (82), *asoko* refers to a particular stage of the game, where a soccer player pushed up the defence-line at the wrong time. Furthermore, *asoko* is used only when the speaker assumes that the hearer can identify the exact time. That is, the point of time designated by *asoko* is always definite PAST. Let us signify the conceptual image of *asoko* in (80) as follows:

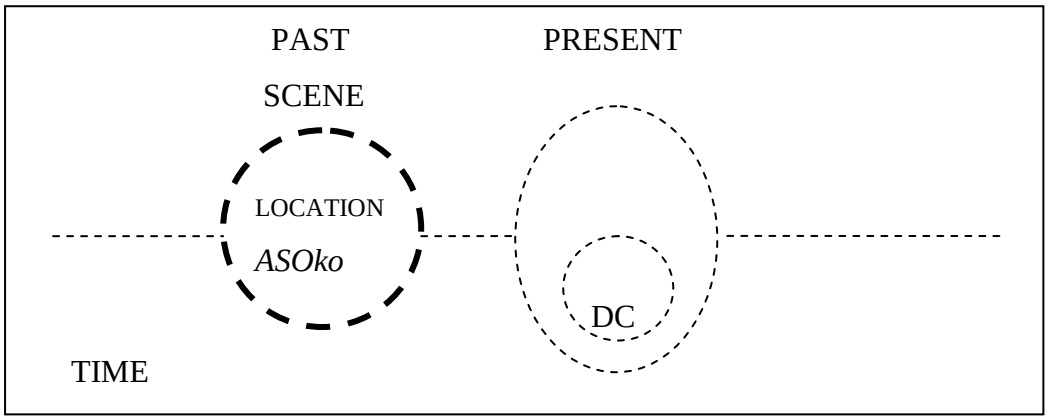


Figure (7.43): The conceptualization of LOCATION with *ASOko* in TIME

The LOCATION of *asoko* is profiled in the PAST and designates a temporal scene which is separated from the DC.

The discussion above shows that the main temporal characteristic of LOCATION of the *–ko* suffix is non-PRESENT, which means that EVENT or EXPERIENCE as a fuzzy bounded entity is construed from two sides of the PRESENT of the DC, with the PAST signalled by the *A*-series and the FUTURE using the *SO*-series. The deictic contrast between the *SO*-series and *A*-series with LOCATION of the *–ko* suffix can be classified as the DEFINITENESS contrast as observed in 6.3.1.2, where the *SO*-series can signal indefinite FUTURE and the *A*-series can mark definite PAST in canonical discourse.[42] These characteristics are limited to the EXOPHORIC use.

7.3.8 The *–ko* suffix as temporal expressions in the ENDOPHORIC use

Finally, this section will deal with several issues related to the *–ko* suffix as temporal expressions in the ENDOPHORIC use based on two subcategories of language-internal information, the anaphoric use, and the discourse deictic use, as introduced in 2.3.2.[43] In the EXOPHORIC use discussed in the previous sections, the TIME domain always includes the

[42] DEFINITENESS contrast of LOCATION in the SPACE domain is used to express whether or not a value of the *–ko* suffix can be connected with the same value in Hearer Space. However, in the TIME domain, *asoko* can be employed to express a monologue, whereas the *A*-series just marks the direct experience of the speaker and makes no deictic contrast with the *SO*-series. This type of use is generally called the recognitional use of demonstratives.

[43] I defined the pragmatic uses based on extra-linguistic information as the EXOPHORIC use including the exophoric use and the recognitional use, on which this thesis has focused.

deictic centre in the coding time of the utterance. However, in the ENDOPHORIC use, the deictic centre is positioned outside the TIME domain. In other words, the conceptualization of TIME in the ENDOPHORIC use is not deictically anchored in the speech situation. Therefore, extensional properties of the *–ko* suffix are restricted to LOCATION or PART excluding FIELD, because FIELD is a component of the deictic centre. Determining whether the *–ko* suffix designates LOCATION or PART depends on whether it resides within or outside an EVENT interval. PART of the *–ko* suffix in temporal expressions is always interpreted within an EVENT interval, or LOCATION occurs without an EVENT interval.

Concerning the deictic roots, although the ENDOPHORIC use in Japanese demonstratives is generally marked by the *SO*-series, the *KO*-series can be also employed in many contexts. In Langacker (1987, 1990), this type of perceptual difference in linguistic phenomena is analyzed as a dichotomy of construals between ‘‘subjectivity’’ and ‘‘objectivity’’.[44] Let us depict Langacker’s model (1987:129) in a slightly simplified form (b) as follows:

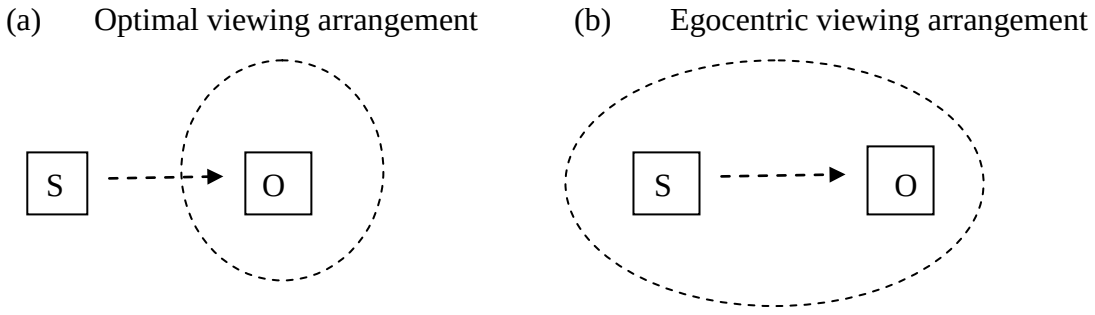


Figure (7.44): Two types of viewing arrangements of construals

In Figure (7.44), *S* stands for the viewer or SELF, and *O* for the object being observed, or OTHER; the arrow indicates the conceptual relationship between the two. Figure (7.44a) is called the **optimal viewing arrangement**, which contrasts with Figure (7.44b) which is called the **egocentric viewing arrangement**.

The optimal viewing arrangement requires that the attention of *S* is focused solely on *O*; *S* is totally separated from the scene of the object indicated by the broken-lined circle, to the extent that *S* loses all awareness of his own role as perceiver. Therefore, the optimal viewing arrangement is called an objective construal (objectivity). On the other hand, the egocentric viewing arrangement is characterized by an expansion of the scene of the object

[44] In Iwasaki (2009), differences between the two expressions *mae* ‘front as earlier’ and *saki* ‘front as later’ are examined using cognitive experiments and Langacker’s concept of subjectivity.

(indicated by the broken-lined circle) beyond the region of perceptual optimality to include *S* and his/her immediate surroundings (Langacker 1987:129-131).[45] This is called a subjective construal (subjectivity).

Following Langacker's notion of the objectivity, I will represent the TIME domain in the ENDOPHORIC use as follows:

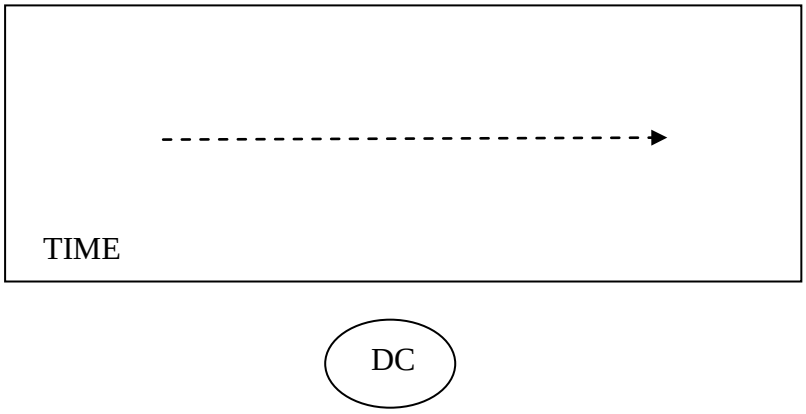


Figure (7.45): The objective construal of TIME in the ENDOPHORIC use

In the TIME domain above, the deictic centre is excluded from the domain itself and it is not necessary to conceptualise a PRESENT moment. This is a crucial difference from the Basic TIME line in the EXOPHORIC use, which always sets the DC as the PRESENT moment located between PAST and FUTURE. Because of the exclusiveness of the DC from the domain, the *–ko* suffix in the ENDOPHORIC use is hypothesized conceptually to be motivated by another type of metaphor for TIME, namely that of ''SEQUENCE IS RELATIVE POSITION ON A PATH'' proposed in Moore (2006), where TIME is determined relative to another time irrespective of the deictic centre.

In the following two sections, I will examine two temporal expressions using *soko* and *koko* in the ENDOPHORIC use based on the above notions.

[45] From observing various deictic expressions, Uehara (2006) proposes a 'subjectivity typology', in which Japanese can be categorized as a subjective language in typological comparisons.

7.3.8.1 *SOkora* with a Time expression.

In 5.2.6, we have discussed the expression *kokora* 'around here', which indicates that **the *–ko* suffix with the *–ra* suffix expands a fuzzily bounded region** (from 'here' to 'around here'). *Kokora* is only used in the EXOPHORIC use but *sokora* is available in the ENDOPHORIC use as well as in the EXOPHORIC use. Let us recall the conceptual difference of the *–ko* and *–ra* suffixes by means of Figure (5.6). [46]

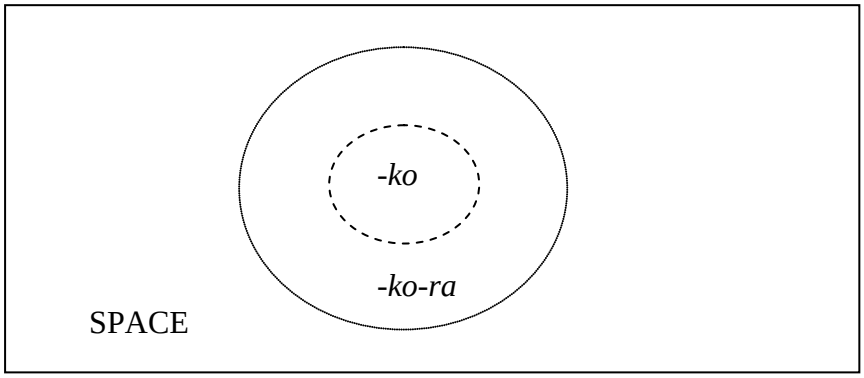


Figure (7.46): The conceptualization of the *–ko-ra* suffixes

Both regions are fuzzy bounded, but I depict the level of fuzziness by the degree of fineness of the broken-line: the finer broken-lined circle of the *–ko-ra* suffixes signifies a fuzzier entity than the normal broken-line of the *–ko* suffix alone. This image schema in the SPACE domain can be transferred into the TIME domain according to the ''invariance principle''. Let us look at the following example of *sokora* as an approximate temporal expression.

[46] I take up the temporal APPROXIMATION in the complex temporal expressions such as *koko* with *shibaraku, toobun* and *saikin* in 7.3.6. Concerning *kokora* as an approximate temporal expression, one typical example used in everyday life is follows:

(i) **Kokora** de kyuukee shimashoo.
KOkora de rest let's have
'Let's have a rest around this time.'

This is expressed when people have a break during a work or an activity. *Kokora* refers not to the exact time of 'now' rather to an approximate time of 'now' such as 'around now or around this time'.

(84) Jitsuni nagai nijikan datta. **Juujikan ka sokora** wa
very long two hours was ten hours or SOkora TOP
sugiteshimatta yoonakigasuru.
have passed seem
'It was a very long two hours. It seemed that about ten hours or so passed.'
CAT

In (84), the real time consisted of just two hours but the speaker construes the TIME as around ten hours, where the phrasal division of *juujikan ka sokora* consists of three expressions:

[*juujikan*] 'ten hours' + [*ka*] 'or' + [*sokora*] 'around there'

which are NPs in an appositional relation. Considering the full construction of these expressions, we can reanalyze them as follows:

Morphology	Semantics
[*juu*]	Number
-ji	Time
-kan	Temporal-extent
ka	OR
SO-	ENDOPHORIC
-ko	LOCATION
-ra	Temporal APPROXIMATION

Let us concatenate the above concepts: (i) a number plus *–ji* makes a TIME clock expression; (ii) adding *–kan* changes the TIME clock expression into a Temporal extent; (iii) adding the *ka* connective makes an appositional relation with the following expression; (iv) adding *soko* tracks the previously mentioned Temporal extent; and (v) *soko* plus *–ra* signals Approximation of the Temporal-extent as fuzzy. Thus, the idiomatic temporal expression *juujikan ka sokora* means 'about ten hours or so'.[47]

[47] Concerning temporal expressions employed in this idiom, they are also available as a simple time clock expression such as *juuji ka sokora* 'about ten o'clock or so' without *kan* for the temporal-extent and any calendar expression can become temporal APPROXIMATION such *as juugatsu ka sokora* 'about October or so', *jukkagetsu ka sokora* 'about ten months or so' and *juunen ka sokora* 'about ten years or so'.

On a conceptual level, we can depict this idiomatic expression in the relation among multiple Mental Spaces.[48]

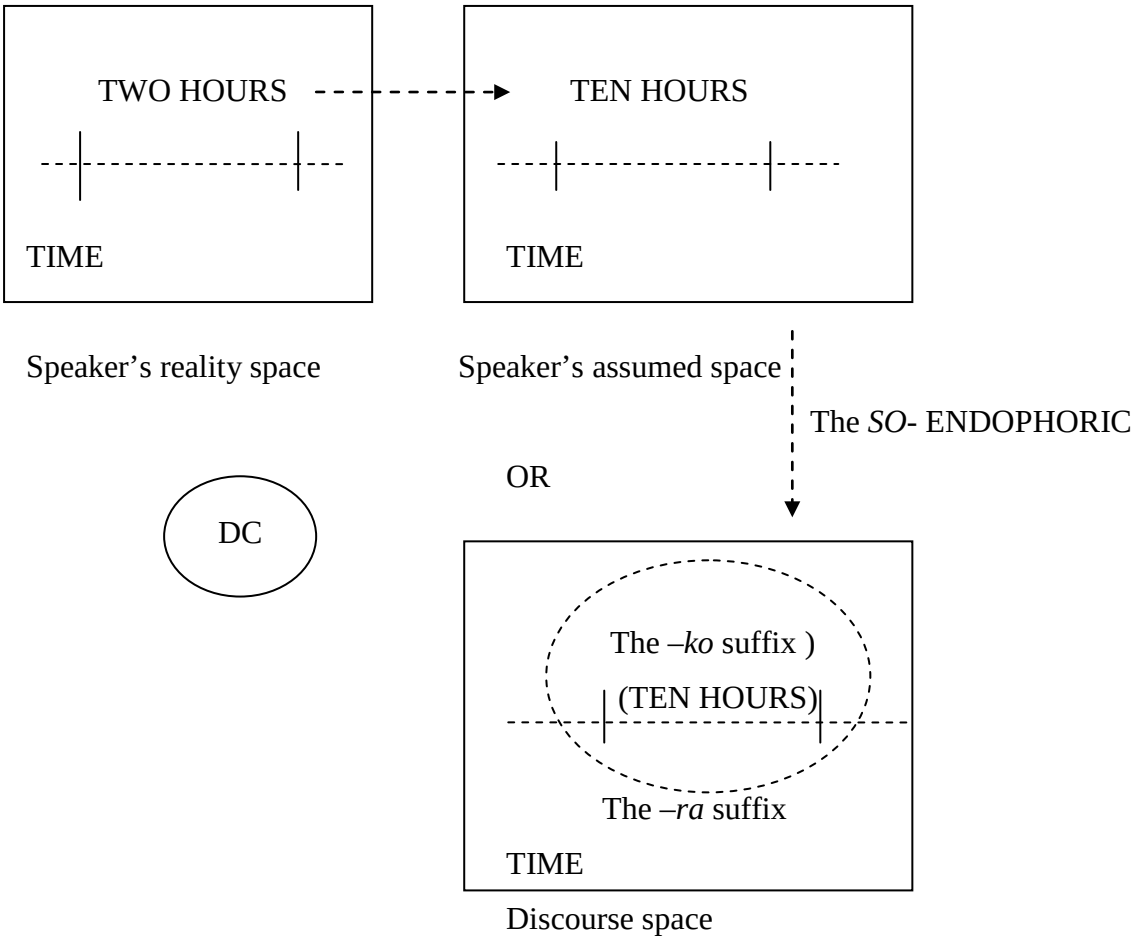


Figure (7.47): Multiple Mental Spaces of *juujikan ka sokora*

It is important to recall two presuppositions: (i) the DC should be excluded from all TIME domains because of ''objectivity'' (non-deictic perspective) and (ii) all four Mental Spaces above should be conceptualized as the speaker's construal, e.g. Discourse space within the speaker's mind.

Although the temporal expression *juujikan ka sokora* consists of three phrasal units [juujikan, ka, sokora], we can hypothesize TIME domains in various Mental Spaces. First of all, as the speaker knows that in reality the time is two hours, TWO HOURS is

[48] In order to avoid confusion, I have ignored the difference between the domain of SPACE and the Mental Space, because we have discussed the SPACE domain in the speaker's Mental Space. A domain is a background knowledge structure of concepts (introduced in 4.3.2) and a Mental Space is a backstage cognition for a construal (in 4.5). Thus, as seen in Figure (7.47), one basic domain TIME can be construed in various Mental Spaces.

conceptualized in the speaker's reality space. Secondly, 'two hours' is recognized as TEN HOURS in the speaker's assumed space. Thirdly, the *ka* connective signals that there is an alternative Temporal construal. Fourthly, the *SO*- ENDOPHORIC marker links TNE HOURS in the speaker's assumed space to the *–ko* suffix in the discourse space. Finally, the *–ra* suffix change TEN HOURS into an APPROXIMATE temporal interval in the discourse space, which is represented by the broken-lined circle.

7.3.8.2 *SOko* and *KOko* as temporal expressions in the ENDOPHORIC use

In 2.3.2, we have confirmed that the *–ko* suffixes can be employed both in the anaphoric use for tracking a spatial discourse participant and in the discourse deictic use for linking two discourse units. In the final discussion of this thesis, I will examine the *–ko* suffix as a temporal expression in the ENDOPHORIC use, where the difference between the *SO*- and *KO*-series can be clarified, based on the difference between the subjectivity and objectivity in a construal.

I will illustrate prototypical examples of the *–ko* suffix as temporal expressions in the ENDOPHORIC use from my data. Firstly, let us observe the anaphoric use of *soko* and *koko*, which can trace a temporal entity in the preceding discourse (antecedents are underlined).

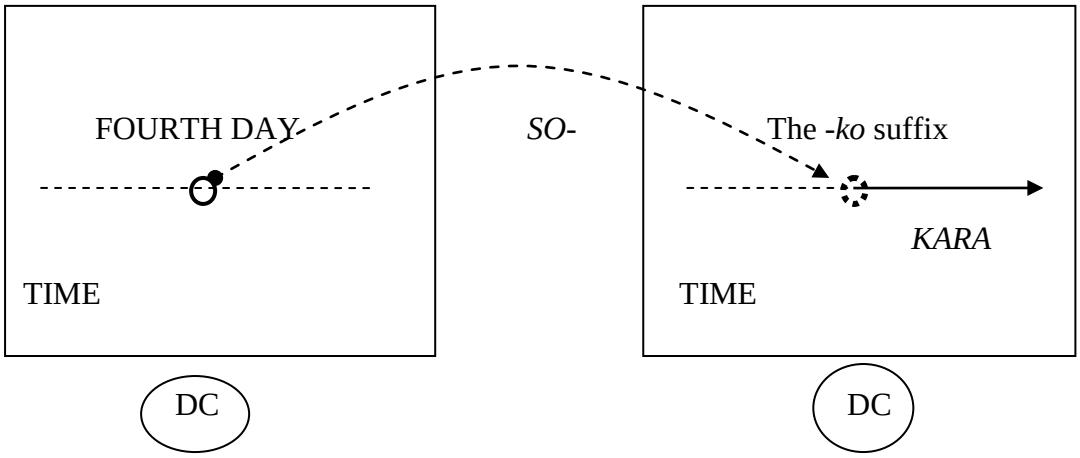
(85) <u>Yokkame</u> o piiku ni kyuu kooka suru anmonia to **soko** kara kyuu
fourth day ACC peak at sharply falling do ammonia and SOko from sharply
jooshoo suru nyooso no nihon no kyokusen no koosa ga aru
rising do urea GEN two GEN curved line GEN intersection NOM exist
'There is an intersection of two curved lines, one of which is a sharply falling line of ammonia with a peak on the fourth day, and the other of which is a sharply rising line of urea.'
FETUS (p96)

(86) Yokkame ni wa…kore ga ookiku shimboo e mukatte nagarekomu…
fourth day in TOP this NOM large atrium to toward flow into
Koko de hai no junkan ga hajimaru noda.
KOko at lung GEN circulation NOM begin it is that
Ano toki suguni shimboo e sumi ga modotta wake da.
that time soon atrium to ink NOM return reason COP
'On the fourth day… this flows into the atrium on a large scale… At this time, the circulation of the lungs begins. That's why the ink quickly returned to the atrium at that time.'
FETUS (p97)

Soko in (85) tracks a temporal entity *yokkame* 'the fourth day' in the previous phrase. *Koko* in (86) has an anaphoric relation with *yokkame* 'the fourth day' in the preceding discourse, which is also tracked by the temporal expression *ano toki* 'that time'.

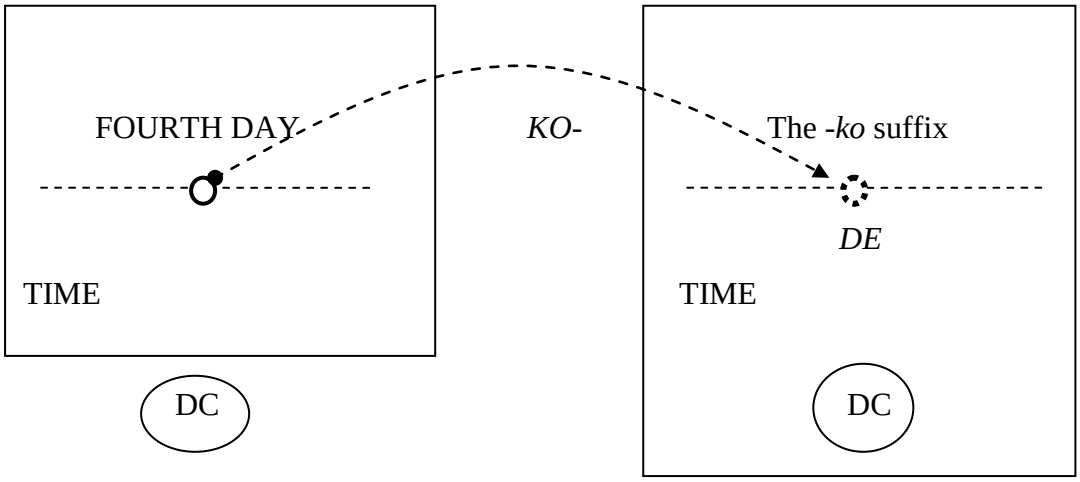
What is deeply significant is that the *SO*-series in (85) and the *KO*-series in (86) can be alternated with each other without changing the contextual meanings or the grammatical functions. Although the *SO*-series is generally classified as an ENDOPHORIC marker, the *SO*-series can be interchanged for the *KO*-series in many contexts, as presented in 3.2.3. For example, Kuno (1973:288) suggests that the *KO*-series in the anaphoric use can be considered to be a ''semi-anaphoric use'', where the *KO*-series can refer to something as if it were visible to both the speaker and the hearer in the immediate discourse situation.

By means of Mental Spaces, we can describe this phenomenon as construal alternatives between the *SO*- and the *KO*-series based on the difference between subjectivity construal and objectivity construal as follows:



Discourse space 1 Discourse space 2

Figure (7.48): The anaphoric relation between TIME expression and *SOko*



Discourse space 1 Discourse space 2

Figure (7.49): The anaphoric relation between TIME expression and *KOko*

Figures (7.48) and (7.49) show that *soko* and *koko* can trace a temporal entity (FOURTH DAY), where the *SO*- and *KO*-series link two Discourse spaces. LOCATION of the *–ko* suffix is assumed to possess the same value as FOURTH DAY, when in combination with the Posterior-durative *KARA* with *soko* and the Temporal-location *DE* with *koko*.

When comparing the two Figures above, the crucial difference is whether or not the TIME domain can include the DC, where the *KO*-series connects with the *–ko* suffix with the DC in the TIME domain. As opposed to the objectivity of the *SO*-series, this type of construal is subjective construal, which corresponds to the ‘‘semi-anaphoric use’’ in Kuno (1973). This

use of *koko* is still the ENDOPHORIC use (based on language internal information) but the DC is inside the Discourse space, which occurs as if it were in a PRESENT interval.

It is generally hypothesized that the subjective construal of the *KO*-series is more likely to occur than the objective construal of the *SO*-series in circumstances where the speaker (or the writer) takes a close perspective of the discourse contents, behaving as if he were involved in that situation.

Next, let us examine *soko* and *koko* in the discourse deictic use.

(87) ‘‘Maa maa’’ to hakase ga nadameru yooni itte […]
well well QUO doctor NOM soothe like say-LINK
sokode hakase wa ‘‘fuofuo’’ to waratta.
SOkode doctor TOP giggled
‘ ‘‘Well well’’ the doctor said in a soothing manner, […]. Then, the doctor giggled.’
WORLD

Sokode in (87) is typically considered to be a simple expression which functions as a connective (as presented in 2.3.2).[49] In (87), *sokode* functions to link two EVENTs, which are: (i) the doctor speaks and (ii) the doctor giggles after speaking.

Let us illustrate the discourse deictic use of *kokode* in the following example.[50]

(88) Kyoo no bun wa ashita mata torikaeseba ii.
today GEN part TOP tomorrow again if recover ok
Jibun ni soo iikikasenagara atoshimatsu o hajimeru. Shikashi […]
self to so persuade-LINK clearing up ACC start but
kokode watakushi wa […] moo ikko dake tamago o toridasu.
KOkode I TOP one more only egg ACC pick up
‘It is ok if I catch up on today’s part tomorrow. I persuade myself to do so and start to clear up. But…at this time, I pick up one more egg.’
FETUS (p81)

[49] *Sokode* as a connective can be used for changing a topic in discourse similar to ‘by the way’, and can connect cause and result of two discourse units. In (87), *sokode* can be substituted for by the complex temporal adverbial *sono toki* ‘at that time’.

[50] Takayama and Aoki (eds) (2010:153) points out that *koko* is used as a connective in one of the oldest Japanese texts (AD712), where the form *kokoni* indicates ‘at that time’. *Kokoni* has been lost in Modern Japanese. However, this indicates that grammaticalization from a demonstrative to a connective occurred quite early.

In (88), *kokode* is used for connecting EVENT 1 (to clear up) and EVENT 2 (to pick up an egg).

As seen in the anaphoric use, *sokode* in (87) and *kokode* in (88) are also interchangeable via construal alternatives without changing the contextual meaning. Let us represent the construal difference between *sokode* in (87) and *kokode* in (88) with Mental Spaces.

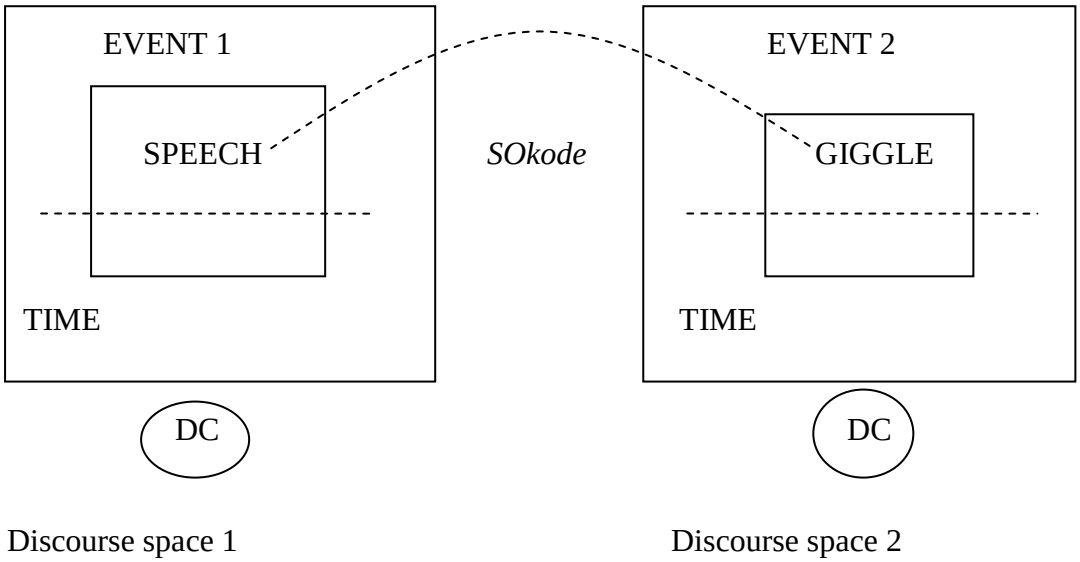


Figure (7.50): The discourse deictic use of *SOkode* linking two EVENTS

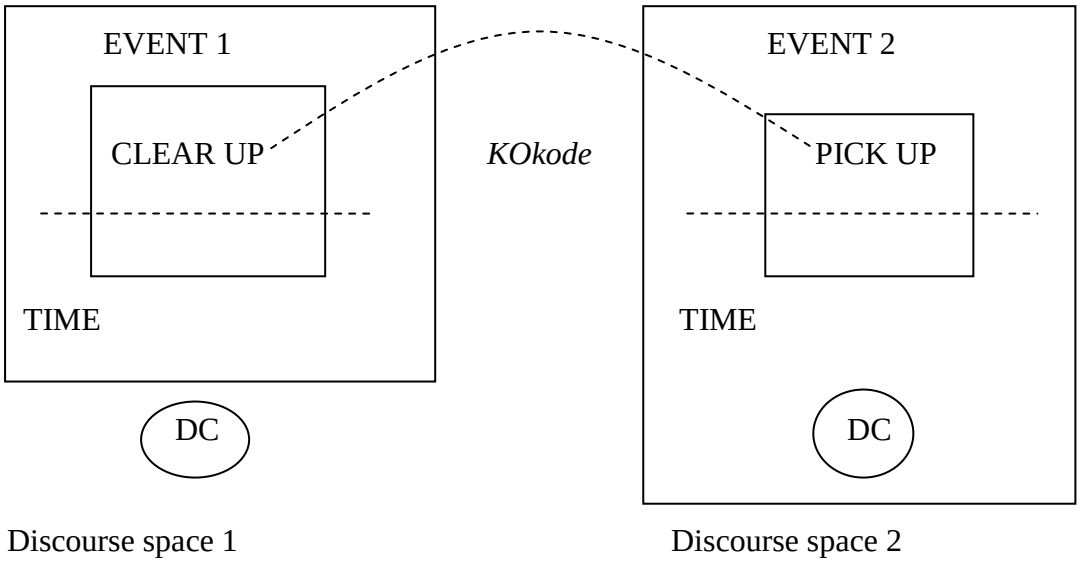


Figure (7.51): The discourse deictic use of *KOkode* linking two EVENTS

Unlike *soko* and *koko* in the anaphoric use, *sokode* and *kokode* cannot be morphologically analyzed as the deictic part *SO-* or *KO-* (ENDOPHORIC marker), *–ko* (temporal entity) and *de* (locative case), since these forms have been grammaticalized as unitary connectives. Therefore, I hypothesize that *sokode* and *kokode* could function as conceptual connectors between two EVENTS.

As explained in the anaphoric use, the *KO*-series retains a vestige of the exophoric use (like ‘‘semi-anaphoric’’), which creates a pragmatic effect as if the speaker were involved in the discourse situation. This is a characteristic of subjective construal by the *KO*-series, where the deictic centre is conceptualized inside the domain of an EVENT as observed in Figure (7.51). Whether the speaker (or the writer) chooses subjective or objective construal is associated with the type of narration; for instance, the third person narrative in (87) tends to be an objective construal with the *SO*-series and the first person narrative in (88) tends to be a subjective construal with the *KO*-series.

7.3.9 Summary

In 7.3, I have examined the conceptual relation between the three properties of the *–ko* suffix and TIME. Compared with *ima* ‘now’ and *kore*, it is clear that the PART of *koko* with sequential duratives such as *made* ‘until’ and *kara* ‘from’ can designate the PRESENT interval within an EVENT in the TIME domain. Appositionally combined with various temporal extent expressions such as *shibaraku* ‘while’, *toobun* ‘while’, and *saikin* ‘recently’, we can confirm that the FIELD of *koko* is associated with APPROXIMATION of the PRESENT interval, which is also verified through comparison with *kono* plus temporal extent expressions. With respect to the PAST and the FUTURE, these can be profiled by LOCATION of *soko* and *asoko* in the EXOPHORIC use. Furthermore, we scrutinized how *soko* can profile temporal expressions in the ENDOPHORIC use, including the connective function.

Finally, let us summarise the prototypical conceptualizations of the three properties of the *–ko* suffix as temporal expressions.

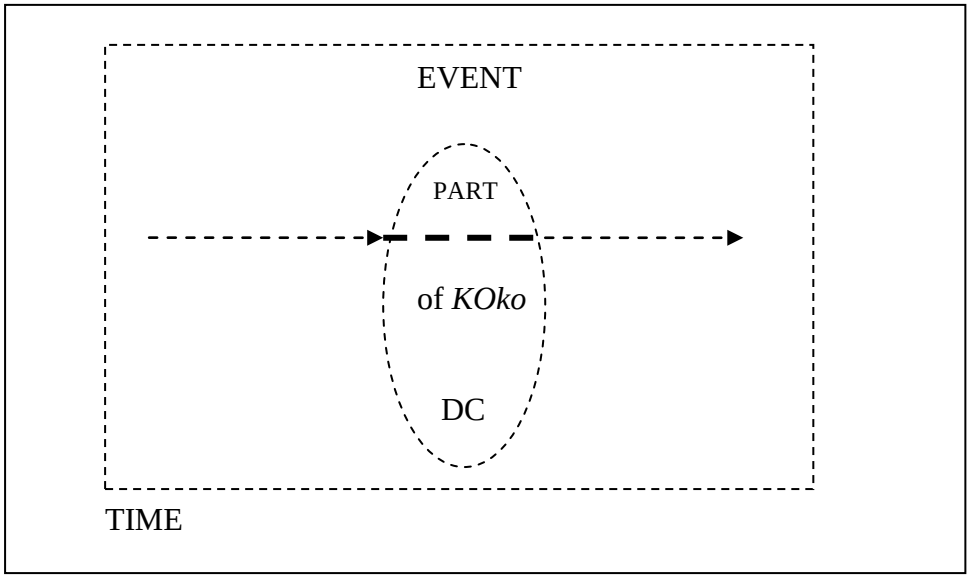


Figure (7.15): The conceptualization of PART in TIME

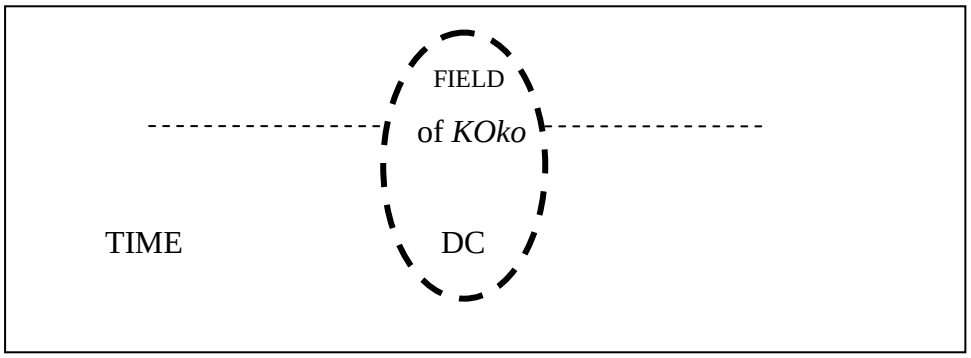


Figure (7.35): The conceptualization of FIELD in TIME

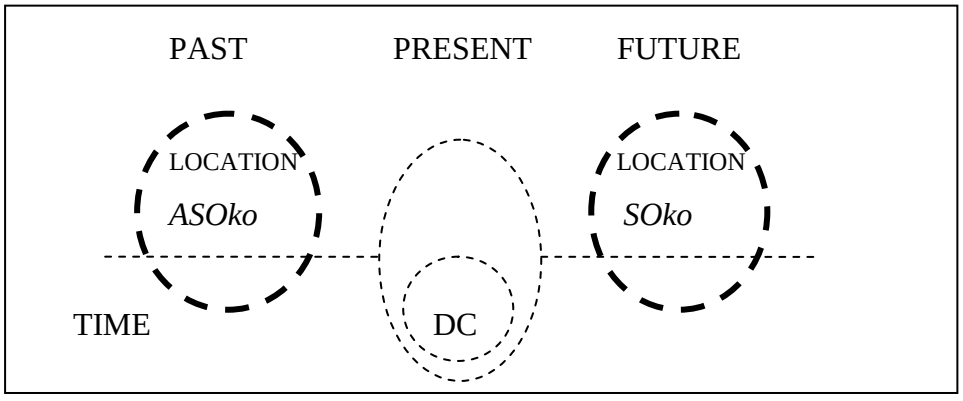


Figure (7.41): The conceptualization of LOCATION in TIME

These points have been overlooked in previous studies because they have focused on the *KOSOA* part of the demonstratives. I have demonstrated how the *–ko* suffix interacts with the

notion TIME. Furthermore, I have analyzed the *–ko* suffix in its function of tracking a temporal entity or linking two discourse events in the ENDOPHORIC use, where we have discussed the difference of use between the *SO*- and *KO*-series based on the difference in construals between the objective and subjective construals.

Chapter 8 Conclusion

I have aimed to clarify the intensional and extensional meanings of Japanese spatial demonstratives using two distinct steps: the first was to extract the essential conceptual properties of the *–ko* suffix, and the second was to investigate the cognitive and pragmatic facets of the spatial demonstratives *koko, soko* and *asoko* in terms of various deictic contrasts expressed by *KOSOA*, the construal alternatives between the *–ko* suffix and the *–re* suffix, and temporal expressions transferred from the semantic properties of the *–ko* suffix.

Although Japanese demonstratives have been extensively studied, the focus has been on the deictic part *KOSOA*, and the analysis of the qualitative suffixes of demonstratives has been significantly overlooked, because the qualitative suffixes are non-deictic. That is, the most prominent research strategies in previous studies may be summarised as follows:

Analyze KOSOA ⟶ attach qualitative suffixes ⟶ Demonstratives
(The arrow indicates the progression of research interests)

Therefore, in defining meanings of the qualitative suffixes of demonstratives, researchers have been heavily influenced by the deictic notions of *KOSOA*, e.g. [near] and [far], and it has not been possible to extract the essential concepts of the qualitative suffixes as seen in Chapter 3.

For this reason, the cognitive approach has been introduced in Chapter 4 in order to study in more depth the spatial demonstratives *koko, soko* and *asoko*. Adopting this approach, I have concentrated first on the abstract meanings of the *–ko* suffix (fuzzy bounded), and then on the relationship between the *–ko* suffix and the deictic centre [I, here, now], where I proposed three conceptual properties, FIELD, LOCATION and PART, as a framework in which to examine the meaning of the *–ko* suffix schematically (Chapter 5).

Taking these three conceptual properties of the *–ko* suffix, I considered the link between the *–ko* suffix and *KOSOA* with various deictic contrasts (Chapter 6). Therefore, the approach of this thesis is directed in a different way to that of previous research, as illustrated below:

Define an abstract notion of the *–ko* suffix as a fuzzy bounded entity

↓

Conceptualize three distinctive properties of the *–ko* suffix with the Deictic centre

↓

Combine three properties of the *–ko* suffix and *KOSOA* with the deictic contrast

↓

Spatial demonstratives

Consequently, I was able to signify the conceptual properties of the *–ko* suffix by virtue of minimizing the influence of the deictic part *KOSOA* and, thus, propose alternative understandings of Japanese spatial demonstratives with various deictic contrasts.

In Chapter 7, I conducted conceptual comparisons between the *–ko* suffix and the *–re* suffix and analyses of the *–ko* suffix used as temporal expressions. These compositions are based on the three conceptual properties of the *–ko* suffix. That is, the three properties of the *–ko* suffix function not only as spatial properties of PLACE but can also be compared with THING of the *–re* suffix and can extend to temporal characteristics in the TIME domain. These results represent the original findings of this thesis, since such issues have not been covered in previous studies.

Next, I highlight my contribution to the cognitive approach using the classification of construal operations proposed by Croft and Cruse (2004:46).

I. Attention/salience

A. Selection

1. **Profiling**
2. **Metonymy**

B. Scope (dominion)

1. Scope of predication
2. Search domains
3. Accessibility

C. Scalar adjustment

1. Quantitative (abstraction)
2. Qualitative (schematization)

D. Dynamic

1. Fictive motion
2. Summary/sequential scanning

II. Judgement/comparison (including identity image schemas)

A. **Categorization** (framing)

B. **Metaphor**

C. Figure/ground

III. Perspective/situatedness

A. Viewpoint

1. **Vantage point**
2. Orientation

B. Deixis

1. **Spatiotemporal** (including spatial image schemas)
2. Epistemic (common ground)
3. Empathy

C. **Subjectivity/objectivity**

IV. Constitution/Gestalt (including most other image schemas)

A. Structural schematization

1. **Individuation** (boundedness, unity/multiplicity, etc)
2. **Topological/geometric schematization** (container, etc)

B. Force dynamics

C. **Relationality** (entity/interconnection)

Under the four headings proposed by Croft and Cruse above, I have highlighted the cognitive operations that have been employed for conceptual and extensional analyses of the *–ko* suffix in this thesis.

The essential cognitive operation for the study of demonstratives is ‘‘Perspective’’, under which the *–ko* suffix of Spatial deictic expressions in the EXOPHORIC use was examined as Vantage point (III.A.1) or the Deictic Centre in the form of *koko*. In the ENDOPHORIC use, the construal alternatives between *koko* and *soko* were shown to be based on a difference of Perspectives either in Subjectivity or Objectivity (III.C).

The three properties of the *–ko* suffix were clarified by means of ‘‘Constitution’’, where FIELD and LOCATION were described as differences of Topological Schematization (IV.A.2) by either including or excluding the DC, and another operation Relationality (IV.C) was explained as a unique characteristic of PART. It was also argued that Individuation (IV.A.1) underpins the distinction between Boundedness of the *–re* suffix and Fuzzy boundedness of the *–ko* suffix.

With respect to ‘‘Judgement’’, the *–ra* suffix indicates different construals in attaching to the *–re* suffix or the *–ko* suffix for their Categorizations (II.A), where the *–re-ra* suffixes conceptualize THINGs as multiple bounded entities, while the *–ko-ra* suffixes expand a fuzzily bounded region (from ‘here’ to ‘around here’). It was also discussed how the Time Metaphors (II.B) function to transfer the three properties of the *–ko* suffix into the TIME domain, based on which temporal meanings of the *–ko* suffix were compared with *ima* ‘now’ and other temporal expressions.

Croft and Cruse (2004:40) suggest that ‘‘the role of conceptualizations in language is clearest when a single language provides alternative expressions for what appear to be truth-conditionally equivalent situations’’. The main analyses of this thesis demonstrated various construal alternatives expressed by several forms with contextually identical meanings among the deictic contrasts (DISTANCE, PERSON and DEFINITENESS), conceptual contrasts between the *–re* and *–ko* suffixes and temporal meanings of deictic expressions with sequential duratives, temporal distance and temporal extents. For this purpose, ‘‘Attention’’ is the key operation for construal alternatives. Profiling (I.A.1), in particular is a decisive cognitive operation by which the speaker selects a particular facet of an entity and employs one expression from among different possible forms. I also signified how Metonymy (I.A.2) functions to profile a facet of a referent as either THING or PLACE.

Finally, I will point out a couple of issues requiring future research. In this thesis, I have focused on the *–ko* suffix among the qualitative suffixes of spatial demonstratives. For this reason, study of the *–re* suffix has been limited to comparison of its intentional properties with those of the *–ko* suffix in several sections (5.2 and 7.2). Further investigations of the extensional properties of the *–re* suffix are desirable. Additionally, it has not been possible to investigate the *–tchi* suffix, which represents the relational entity DIRECTION. Unlike the *–re* suffix, the *–tchi* suffix is related to the deictic centre in a similar way to the *–ko* suffix. For example, when a speaker refers to the place s/he is, the following three expressions are possible in the same context.

(1) Watashino tokoro ni koi.
my place LOC come
'Come to my place.'

(2) Koko ni koi.
KOko LOC come
'Come here.'

(3) Kotchi ni koi.
KOtchi LOC come
'Come this way.'

The places referred to by *watashino tokoro* and *koko* in (1) and (2) are identical with the deictic centre, but *kotchi* in (3) indicates direction 'toward the vicinity of the deictic centre', and not to a particular place. When the *–ko* suffix and *–tchi* suffixes are interchanged in the same situation, various questions arise as to what kind of conceptual differences exist between them, how their construal alternatives are motivated and so on. Thus, it is necessary to conduct a further systematic analysis of the qualitative suffixes of demonstrative pronouns including *–ko*, *–re*, and *–tchi* suffixes.[1]

Concerning the idiomatic expressions found in my data (presented on p22 and in footnote 20 of Chapter 6), these remain to be analysed. However, as I illustrated a type of idiomatic expressions in terms of the properties of the *–ko* suffix in 7.3.8.1 such as Time expression with *sokora*, I predict that other idiomatic complex demonstrative expressions can be solved according to the 'invariance principle' proposed by Lakoff (1993),[2] in which metaphorical mappings preserve the cognitive topology (that is the inherent image-schema structure) of the source domain in a way consistent with the inherent structure of the target domain. When representing a conceptual aggregation of complex demonstrative expressions, I assume several different paths of construals for referents, but, the fundamental properties of spatial demonstratives can be preserved from the SPACE domain to other domains using metaphorical extensions.

[1] As presented in 2.3.1, Japanese has four demonstrative pronouns and the last one consists of the *–itsu* suffix, which represents a human entity and is used in a pragmatically informal style.
[2] I employed it on p222 in the thesis.

Furthermore, I have only discussed temporal expressions in the anaphoric use and the discourse deictic use in terms of the construal differences between the subjective and objective perspectives (7.3.8), but there are various conceptual differences and construal alternatives between the *–re* and *–ko* suffixes in the ENDOPHORIC use. Few studies have been conducted with respect to the *–re* and *–ko* suffixes as connectives in the forms of *sorede* and *sokode*, and *korede* and *kokode*, etc.

Although various interesting problems about the qualitative suffixes of Japanese demonstratives still remain to be discussed, it is my hope that the ideas proposed and the questions resolved in this thesis might form part of a new beginning for future studies of demonstratives. In particular, the three schematic patterns, FIELD, LOCATION and PART, of the *–ko* suffix as conceptual properties have the potential to become useful tools to apply in the investigation of the diverse deictic phenomena involving demonstratives.

Data sources

Essays and novels

Isaka, Kootaroo. 2003. *Juuryoku piero* (Gravity and pierrot). Tokyo: Shinchoo.

———. 2003. *Kamo to ahiru no koinrokkaa (*The coin locker for a wild and a domestic duck). Tokyo: Soogensha.

Miki, Shigeo. 1983. *Taiji no sekai* (The world of the fetus). Tokyo: Chuukoo.

Murakami, Haruki. 1995. *Sekai no owari to haadoboirudo wandaarando* (Hard-boild wonderland and the end of the world). In *CD-ROM Shinchoo bunko hyakusatsu*. Tokyo: Shinchoo.

———. 2002. *Umibe no Kafuka* (Kafka on the shore). Vol. 2. Tokyo: Shinchoo.

———. 2010. *1Q84* (1Q84). Vol. 3. Tokyo: Shinchoo.

Natsume, Sooseki. *Wagahai wa neko dearu* (I am a cat). Tokyo: Aozora bunko. http://www.aozora.gr.jp/cards/000148/files/789_14547.html.

Niki, Etsuko. 1957. *Neko wa shitteita* (The cat knew). Tokyo: Koodansha.

Unno, Taizoo. 1988. *Uchuu no maigo* (A lost child in the universe). Tokyo: Aozora bunko. http://www.aozora.gr.jp/cards/000160/files/3354_12228.html.

Yamamoto, Masakuni. 2004. *Bibooroku* (A memorandum). Tokyo: Koodansha.

Yamamoto, Yuuzoo. 1955. *Ikitoshi ikerumono* (All living things). Tokyo: Shinchoo.

Web sources with titles (all sources were finally reconfirmed on 10 October 2011.)

[61°c]. HP. Available from URL: http://homepage2.nifty.com/61degrees/ramble/2005/09/concentration.html.

Bibbi no yuuutsu (Melancholy of Bibbi). Blog. Available from URL: http://ritsu0120.blog84.fc2.com/blog-date-20091127.html.

Choo butooden 5 kooryaku (Strategy guide for the game Choo butooden 5). HP. Available from URL: http://f58.aaa.livedoor.jp/~nunudead/game/DB5/op/op.htm.

Dream Theatre. Twitter. Available from URL: http://www.nicozon.net/msg/sm258120.

Hachima kikoo. Blog. Available from URL: http://blog.esuteru.com/archives/2915187.html.

Hatena:Bookmark. HP. Available from URL: http://b.hatena.ne.jp/articles/201104/3758.

Hidamari nikki (Sunny spot diary). Available from URL: http://ameblo.jp/chaahc/theme-10000793826.html.

Kimagure Tetsudoo Biyori (Good days for train journey). Blog. Available from URL: http://tetsudo.blog114.fc2.com/blog-entry-51.html.

Kiyopace Blog. Available from URL: http://ameblo.jp/kiyopace/entry-10614088422.html.

Letter from home. Blog. Available from URL: http://babylonsist.blog105.fc2.com/blog-entry-452.html.

Livedoor. Blog. Available from URL: http://pon.blogstation.jp/archives/1564163.html.

*Mari papa (*Mari's papa). HP. Available from URL: http://photozou.jp/photo/show/64123/2305171.
MSN Soodanbako (MSN advice corner). HP. Available from URL: http://soudan1.biglobe.ne.jp/qa2930271.html.
Nagagutsu o haita kurinezumi (Squirrel with long boots). Blog. Available from URL: http://edmundo036.sakura.ne.jp/archives/5377.
Nishi nihon no tabi (Travelling in West Japan). HP. Available from URL: http://www.geocities.jp/syokuninnokai/nisinihon.html.
Wani no heya bekkan (An annex to Wani's room). HP. Available from URL: http://shirowani.fc2web.com/bekkann/gift/gajimusama2-2.htm.
Watashi no sukina Boofu no basho (The places I like in Boofu). HP. Available from URL: http://www.taka21.com/cgibin/fvote/fvote.cgi?detail=%91%e5%95%bd%8eR.

References

Alfonso, Anthony. 1974. *Japanese Language Patterns.* Vol. 2. Tokyo: Sophia University L.L. Centre of Applied Linguistics.
Anderson, Stephen R., and Edward L. Keenan. 1985. Deixis. In Shopen (ed.), 1985:259-308.
Andoo, Sadao. 1986. *Eego no ronri nihongo no ronri* (The Logic of English and Japanese). Tokyo: Taishuukan.
Aoki, Saburoo. 2000. Tokoro no bunpooka (Grammaticalization of ‘tokoro’ Phrase). In Aoki and Takezawa (eds.), 2000:77-103.
———. and Kooichi Takezawa, eds. 2000. *Kuukan hyoogen to* bunpoo (Spatial Expressions and Grammar). Tokyo: Kurosio.
Athanasiadou, Angeliki, Costas Canakis, and Bert Cornillie, eds. 2006. *Subjectification: Various Paths to Subjectivity*. Berlin; New York: Mouton de Gruyter.
Barcelona, Antonio. 2000. *Metaphor and Metonymy at the Crossroads: A Cognitive Perspective*. Berlin; New York: Mouton de Gruyter.
Barke, Andrew, and Satoshi Uehara. 2005. Japanese Pronouns of Address. In Lakoff and Ide (eds.), 2005:301-313.
Bauer, Winifred, William Parker, and Te Kareongawai Evans. 1993. *Maori*. London; New York: Routledge.
Brown, Gillian, and George Yule. 1983. *Discourse Analysis.* Cambridge: Cambridge University Press.
Brown, Roger, and Albert Gilman. 1972 [1960]. The Pronouns of Power and Solidarity. In Giglioli (ed.), 1972:252-282.
Bühler, Karl. 1990 [1934]. *Theory of Language: The Representational Function of Language.* Amsterdam; Philadelphia: John Benjamins.
Carlson, Robert. 1994. *The Grammar of Supyire*. Berlin: Mouton de Gruyter.
Chafe, Wallace. 1994. *Discourse, Consciousness, and Time.* Chicago & London: The University of Chicago Press.

Chiba, Shuuji, and Keiko Murasugi. 1987. A Comparative Study on Deictics in Japanese and English. *Journal of Tsuda College* 19:111-153.
Christophersen, Paul. 1939. *The Articles.* London: Humphrey Milford.
Clark, Herbert H., and Catherine R. Marshall. 1981. Definite Reference and Mutual Knowledge. In Joshi and Webber (eds.), 1981:10-63.
Clausner, Timothy C. and William Croft. 1999. Domains and Image Schemas. *Cognitive Linguistics* (10):1-31.
Cole, Peter. 1981. *Radical Pragmatics*. New York: Academic Press.
Croft, William. 1993. The Role of Domains in the Interpretation of Metaphors and Metonymies. *Cognitive Linguistics* 4 (4):335-370.
———. 2002. *Typology and Universals.* 2nd ed. Cambridge: Cambridge University Press.
———, and Alan Cruse. 2004. *Cognitive Linguistics*. Cambridge: Cambridge University Press.
Crystal, David. 1997. *A Dictionary of Linguistics and Phonetics.* 4th ed. Oxford: Blackwell Publishers.
Denny, J. Peter. 1978. Locating the Universals in Lexical Systems for Spatial Deixis. In Farcas and Todrys (eds.), 1978:71-84.
Diessel, Holger. 1999. *Demonstratives: Form, Function, and Grammaticalization.* Amsterdam: John Benjamins.
———. 2005. Distance Contrasts in Demonstratives. In Haspelmath, Gil, and Comrie (eds.), 2005:170-173.
———. 2006. Demonstratives, Joint Attention, and the Emergence of Grammar. *Cognitive Linguistics* 17:463-489.
Dirven, René, and Ralf Pörings. 2002. *Metaphor and Metonymy in Comparison and Contrast.* Berlin; New York: Mouton de Gruyter.
Dixon, Robert M. W. 2003. Demonstratives: A Cross-Linguistic Typology. *Studies in Language* 27 (1):61-112.
———. 2009. *Basic Linguistic Theory: Grammatical Topics*. 2 vols. Oxford; New York: Oxford University Press.
Endoo, Megumi. 1989. Nihongo no shijishi Ko So A no tsukaiwake ni kansuru gengo shinrigakuteki kenkyuu (A Psychological Study of the Use of Demonstratives *Ko, So*, and *A*). *Tookyoo Daigaku Kyooikugakubu Kiyoo* 28:285-294.
Farcas, Donka, Wesley M. Jacobsen, and Karol W. Todrys, eds. 1978. *Papers from the Parasession on the Lexicon*. Chicago: Chicago Linguistic Society.
Fauconnier, Gilles. 1985. *Mental Spaces: Aspects of Meaning Construction in Natural Language*. Cambridge, Mass.: MIT Press.
———, and Eve Sweetser, eds. 1996. *Spaces, Worlds, and Grammar*. Chicago: University of Chicago Press.
Fillmore, Charles J. 1982a. Frame Semantics. In The Linguistic Society of Korea (ed.), 1982:111-137.
———. 1982b. Towards a Descriptive Framework for Spatial Deixis. In Jarvella and Klein (eds.), 1982:31-59.
———. 1997 [1971]. *Lectures on Deixis.* (revised) ed. Stanford: Centre for the Study of Language and Information.

———, George Lakoff, and Robin Lakoff, eds. 1974. *Berkeley Studies in Syntax and Semantics*. California: University of California.
Fox, Barbara A, ed. 1996. *Studies in Anaphora*. Amsterdam: John Benjamins.
Frawley, William. 1992. *Linguistic Semantics*. Hillsdale, NY: Lawrence Erlbaum Associates.
Frellesvig, Bjarke, and John Whitman. 2008. The Japanese/Korean Vowel Correspondences. *Japanese/Korean Linguistics* 13:15-28.
Fricke, Ellen. 2003. Origo, Pointing, and Conceptualization. In Lenz (ed.), 2003:69-93.
Fukada, Chie, Masaaki Yamanashi, and Kooichiroo Nakamoto. 2008. *Gainenka to imi no sekai: ninchi imiron no apuroochi* (The World of Conceptualization and Meaning: The Cognitive Semantic Approach). Tokyo: Kenkyusha.
Furuta, Toosaku. 1992 [1980]. Ko So A Do kenkyuu no nagare 1 (Reviews of studies of *KO, SO, A* and *DO*.). In Kinsui and Takubo (ed.), 1992:7-31.
Giglioli, Pier Paolo. 1972. *Language and Social Context: Selected Readings*. Harmondsworth: Penguin.
Givón, Talmy. 1979. From Discourse to Syntax: Grammar as a Processing Strategy. In Givon (ed.), 1979:81-112.
———, ed. 1979. *Syntax and Semantics*. Vol. 12. New York: Academic Press.
———. 1984. *Syntax: A Functional-Typological Introduction*. Amsterdam; Philadelphia: John Benjamins.
Greenberg, Joseph H., Charles Albert Ferguson, and Edith A. Moravcsik. 1978. *Universals of Human Language*. 4 vols. Stanford, Calif.: Stanford University Press.
Gundel, Jeanette K., Nancy Hedberg, and Ron Zacharski. 1989. Givenness, Implicature and Demonstrative Expressions in English Discourse. *Chicago Linguistic Society* 25:89-103.
———. 1993. Cognitive Status and the Form of Referring Expressions in Discourse. *Language* 69(2):274-307.
Haiman, John. 1983. Iconic and Economic Motivation. *Language* 59:781-819.
Hall, Edward Twitchell. 1966. *The Hidden Dimension*. Garden City, N.Y.: Doubleday.
———. 1968. Proxemics. *Current Anthropology* 9:83-108.
Halliday, M.A.K., and Ruqaiya Hasan. 1976. *Cohesion in English.* London: Longman.
Hamada, Atsushi. 1946. *Kodai nihongo* (Ancient Japanese Language). Kyoto: Ooyashima.
Haruki, Yoshitaka. 1991. Shijitaishoo kara mita nihongo no shijishi (Japanese Demonstratives Examined in the Light of Referents). *Gengo Bunka Kenkyuu* 17:93-112.
Hashimoto, Shiroo. 1966. Kodaigo no shiji taikee (The Ancient System of Japanese Demonstratives). *Kokugo Kokubun* 35 (6):329-341.
———. 1982. Shijigo no Shitekitenkai (Historical Development of Japanese Demonstratives). In Morioka (ed.), 1982:217-240.
Haspelmath, Martin. 1997a. *Indefinite Pronouns*. Oxford: Oxford University Press.
———. 1997b. *From Space to Time: Temporal Adverbials in the World's Languages*. München; Newcastle: LINCOM Europa.
———, Hans-Jörg Bibiko, Hagen Jung, and Claudia Schmidt. 2005. *The World Atlas of Language Structures*. Oxford: Oxford University Press.

Hattori, Shiroo. 1992 [1968]. Kore Sore Are to This That (*Kore, Sore, Are* and This and That). In Kinsui and Takubo (ed.), 1992:47-53.
Hawkins, John A. 1978. *Definiteness and Indefiniteness: A Study in Reference and Grammaticality Prediction*. London: Croom Helm.
Himmelmann, Nikolaus P. 1996. Demonstratives in Narrative Discourse: A Taxonomy of Universal Uses. In Fox (ed.), 1996:205-254.
Hinds, John. 1986. *Situation VS Person Focus.* Tokyo: Kurosio.
Hoji, Hajime, Satoshi Kinsui, Masanori Takubo, and Ayumi Ueyama. 2003. The Demonstratives in Modern Japanese. In Li and Simpson (eds.), 2003:97-128.
Horiguchi, Kazuyoshi. 1992 [1978]. Shijigo no hyoogensee (Features of Demonstrative Expressions). In Kinsui and Takubo (eds.), 1992:74-90.
Ikegami, Yoshihiko. 2006. *Eego no kankaku/nihongo no kankaku* (The Sense of English and the Sense of Japanese). Tokyo: Nihon Shuppan Kyookai.
———. 2007. *Nihongo to nihongoron* (Japanese Language and the Theory of Japanese Language). Tokyo: Chikuma.
Imai, Shiroo. 1979. Shijidaimeeshi no shiji kinoo nitsuite (On the Referential Function of Demonstrative Pronouns). *Hokkaidoo Daigaku Jinbunkagaku Ronshuu* 15:1-16.
Imai, Shingo. 2003. Spatial Deixis: How Demonstratives divide Space, State University of New York, Buffalo. PhD.
Iori, Isao. 1994. Teesee ni kansuru ichi koosatsu (A Study of Definiteness). *Gendai Nihongo Kenkyuu* 1:40-56.
———. 1995a. Kono to sono (This and that). In Miyajima and Nitta (eds.), 1995:619-31.
———. 1995b. Tekisutoteki imi no fuyo nitsuite (On Adding Textual Meanings). *Nihon Gakuhoo* 14:79-92.
———. 1996. Shiji to daiyoo (Reference and Substitution). *Gendai Nihongo Kenkyuu* 3:73-91.
———. 2007. *Nihongo niokeru tekisuto no kessokusee no kenkyuu* (A Study of Textual Cohesion in Japanese). Tokyo: Kurosio.
Iwasaki, Shinya. 2009. A Cognitive Grammar account of Time Motion 'Metaphors': A View from Japanese. *Cognitive Linguistics* 20 (2):341-366.
Jarvella, Robert J. and Wolfgang Klein, eds, *Speech, Place , and Action*, New York: John Wiley & Sons, 1982.
Johnson, Mark. 1987. *The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason*. Chicago: University of Chicago Press.
Jungbluth, Konstanze. 2003. Deictics in the Conversational Dyad: Findings in Spanish and Some Cross-Linguistic Outlines. In Lenz (ed.), 2003:13-40.
Kageyama, Taroo, and Hideki Kishimoto, eds. 2004. *Nihongo no bunseki to gengo ruikee: Shibatani Masayoshi kyooju kanreki kinen ronbunshuu* (Analysis of Japanese and Typology: Collected Articles for the 60th Birthday of Prof. Masayoshi Shibatani). Tokyo: Kurosio.
Kamio, Akio. 1997. *Territory of Information.* Amsterdam: John Benjamins.
———, and Kenichi Takami, eds. 1999. *Function and Structure: In Honor of Susumu Kuno*. Amsterdam: John Benjamins.

———, and Margaret Thomas. 1999. Some Referential Properties of English *It* and *That*. In *Function and Structure*: In Kuno and Takami (eds.), 1999:289-315.
Kanzaki, Takaaki. 1994. *Nichieego daimeeshi no kenkyuu* (Study of Pronouns in Japanese and English). Tokyo: Kenkyuusha.
Karttunen, Lauri Juhani. 1971. *Discourse Referents*. Bloomington: Indiana University Linguistics Club.
Kattan-Ibarra, Juan, and Christopher J. Pountain. 2003. *Modern Spanish Grammar: A Practical Guide*. London: Routledge.
Kawakami, Seesaku, ed. 1996. *Ninchi gengogaku no kiso* (The Basics of Cognitive Linguistics). Tokyo: Kenkyusha Shuppan.
Kinsui, Satoshi, and Yukinori Takubo, eds. 1992. *Shijishi* (Demonstratives). Tokyo: Hitsuji.
———. 1992a [1990]. Danwakanri riron kara mita nihongo no shijishi (Japanese Demonstratives in Discourse Management Theory). In Kinsui and Takubo (eds), 1992:123-150.
———. 1992b. Nihongo shijishi kenkyuushi kara / e (To and from Literature Reviews of Japanese demonstratives). In Kinsui and Takubo (eds.), 1992:151-192.
Koizumi, Tamotsu. 2001. Chokuji (Deixis). In Koizumi (ed.), 2001:5-32.
———, ed. 2001. *Nyuumon goyooron* (Introduction to the Study of Pragmatics). Tokyo: Kenkyuusha.
Kokuritsu Kokugo Kenkyuujo ed. 1981. *Nihongo no shijishi* (Japanese Demonstratives). Tokyo: Ookura Shoo.
Kuno, Susumu. 1973. *The Structure of the Japanese Language.* Cambridge, Massachusetts, and London: The MIT Press.
———. 1978. *Danwa no bunpoo* (Discourse Grammar). Tokyo: Taishuukan.
———, and Etsuko Kaburaki. 1977. Empathy and Syntax. *Linguistic Inquiry* 8:627-72.
Kuroda, Shigeyasu. 1992 [1979]. Ko So A nitsuite (On *Ko, So*, and *A*). In Kinsui and Takubo (eds), 1992:91-104.
Kushima, Shigeru. 2001. *Mono to basho no tairitsu* (The Tension between Thing and Place). Tokyo: Kurosio.
Lakoff, George. 1987. *Women, Fire, and Dangerous Things: What Categories reveal about the Mind*. Chicago: University of Chicago Press.
———. 1990. The Invariance Hypothesis: Is Abstract Reason based on Image-Schemas? *Cognitive Linguistics* 1:39-74.
———. 1993. The Contemporary Theory of Metaphor. In Ortony (ed.), 1993:202-251.
———, and Mark Johnson. 2003. *Metaphors We Live By*. 2nd ed. Chicago: University of Chicago Press.
Lakoff, Robin. 1974. Remarks on *This* and *That*. In Fillmore, G.Lakoff and R. Lakoff (eds.), 1974:1-12.
Lambrecht, Knud. 1994. *Information Structure and Sentence Form.* Cambridge: Cambridge University Press.
Langacker, Ronald W. 1987. *Foundations of Cognitive Grammar.* Vol. 1. California: Stanford University Press.
———. 1990. Subjectification. *Cognitive Linguistics* 1:5-38.

———. 1991. *Foundations of Cognitive Grammar*. Vol. 2. California: Stanford University Press.
———. 1996. Conceptual Grouping and Pronominal Anaphora. In Fox (ed.), 1996:333-378.
———. 1999. *Grammar and Conceptualization*. Berlin; New York: Mouton de Gruyter.
———. 2008. *Cognitive Grammar: A Basic Introduction*. Oxford: Oxford University Press.
Lenz, Friedrich, ed. 2003. *Deictic Conceptualisation of Space, Time, and Person*. Amsterdam: John Benjamins.
Levinson, Stephen C. 1983. *Pragmatics*. Cambridge: Cambridge University Press.
———. 2003. *Space in Language and Cognition: Explorations in Cognitive Diversity*. Cambridge: Cambridge University Press.
Li, Audrey, and Andrew Simpson, eds. 2003. *Functional Structure(s), Form and Interpretation: Perspective from Asian Languages*. London: Routledge Curzon.
Lichtenberk, Frantisek. 1983. *A Grammar of Manam*. Honolulu: University of Hawaii Press.
———. 1991. Semantic Change and Heterosemy in Grammaticalization. *Language* 67 (3):475-509.
———. 2008. *A Grammar of Toqabaqita*. Berlin; New York: Mouton de Gruyter.
Linguistic Society of Korea, ed. 1982. *Linguistics in the Morning Calm*. Seoul: Hanshin.
Lyons, Christopher. 1999. *Definiteness*. Cambridge: Cambridge University Press.
Lyons, John. 1977. *Semantics*. Vol. 2. Cambridge: Cambridge University Press.
———. 1995. *Linguistic Semantics.* Cambridge: Cambridge University Press.
Marmaridou, Sophia S.A. 2000. *Pragmatic Meaning and Cognition*. Amsterdam: John Benjamins.
Matsumoto, Yoo, ed. 2003. *Ninchi imiron* (Cognitive Semantics). Tokyo: Taishuukan.
Maynard, Senko K. 1998. *Principles of Japanese Discourse*. Cambridge: Cambridge University Press.
Mikami, Akira. 1992 [1970]. Kosoado shoo (Remarks on *Kosoado*). In Kinsui and Takubo (eds.), 1992:35-37.
Miyajima, Tatsuo, and Yoshio Nitta. 1995. *Nihongo ruigihyoogen no bunpoo ge* (A Grammar of Japanese Synonymous Expressions 2). Vol. 2. Tokyo: Kurosio.
Moore, Harumi. 2003. Japanese *Ka*-indefinite and the Semantic Domain of Unknown to the Speaker. *Journal of Pragmatics* 35:589-614.
Moore, Kevin Ezra. 2006. Space-to-Time Mappings and Temporal Concepts. *Cognitive Linguistics* 17 (2):199-244.
Morioka, Kenji, ed. 1982. *Kooza nihongogaku 2* (A Course of Japanese Linguistics Vol. 2). Tokyo: Meiji Shoin.
Morita, Yoshiyuki. 1989. *Kiso nihongo jiten* (A Basic Japanese Dictionary). Tokyo: Kadokawa Shoten.
Nakamoto, Masachie. 1983. *Ryuukyuu goi no kenkyuu* (A Study of Lexicon of Ryuukyuu Dialects). Tokyo: San'ichi Shoboo.
Newmeyer, Frederick J. 1998. *Language Form and Language Function, Language, Speech, and Communication*. Cambridge, Mass.: MIT Press.
Niimura, Tomomi. 1997. Nichiee shijishi taishoo 1 (A Contrastive Analysis in Japanese and English Demonstratives). *Kooza Nihongo Kyooiku* 32:56-71.

———. 1998. Nichiee shijishi taishoo 2 (A Contrastive Analysis in Japanese and English Demonstratives). *Kooza Nihongo Kyooiku* 33:75-94.
———. 2006. Nihongo to eego no kuukan ninshiki no chigai (The Difference in Spatial Cogniton between Japanese and English). *Gekkan gengo* 5: 35-43.
Nitta, Yoshio. 1997. *Nihongobunpoo kenkyuu josetsu* (An Introduction to Japanese Grammar). Tokyo: Kurosio.
Ogden, Charles. K., and Ivor. A. Richards. 1923. *The Meaning of Meaning: A Study of the Influence of Language Upon Thought and of the Science of Symbolism*. 3d ed. New York: Harcourt.
Okamura, Kazue. 1972. Daimeeshi towa nani ka (What are Pronouns?). In Suzuki and Hayashi (eds.), 1972:79-121.
Okazaki, Tomoko. 2010. *Nihongo shijishi no rekishiteki kenkyuu* (A Historical Study of Japanese Demonstratives). Tokyo: Hitsuji.
Oohori, Toshio. 2002. *Ninchi gengogaku* (Cognitive Linguistics). Tokyo: Toodai Shuppankai.
Ootsuki, Fumihiko. 2004[1889]. *Genkai* (The Sea of Words). Tokyo: Chikuma
Ortony, Andrew, ed. 1993. *Metaphor and Thought*. 2nd ed. Cambridge: Cambridge University Press.
Paprotté, Wolf, and René Dirven. 1985. *The Ubiquity of Metaphor: Metaphor in Language and Thought*. Amsterdam: John Benjamins.
Piaget, Jean, and Bärbel Inhelder. 1956. *The Child's Conception of Space*. London: Routledge.
Pinker, Steven. 1994. *The Language Instinct*. New York: W. Morrow.
Price, Henry H. 1953. *Thinking and Experience*. New York: Hutchinson's University Library.
Pride, John. B., and Janet Holmes. 1972. *Sociolinguistics: Selected Readings*. Harmondsworth: Penguin.
Prince, Ellen F. 1981. Toward a Taxonomy of Given-New Information. In Cole (ed.), 1982:223-56.
Ri, Chooha. 2002. *Nihongo Shiji Taikee no Rekishi (A History of the System of Japanese Demonstratives)*. Kyoto: Kyoto Daigaku Gakujutsu Shuppankai.
Ro, too. 2004. Shijishi no fukugoo to sono shuuhen (Issues concerning Compound Expressions of Japanese demonstratives). In Kageyama and Kishimoto (eds.), 2004:93-108.
Rosch, Eleanor. 1978. Principles of Categorization. In Rosch and Lloyd (eds.), 1978:27-48.
———, and Barbara B. Lloyd. 1978. *Cognition and Categorization*. Hillsdale: Lawrence Erlbaum Associates.
Rubba, Jo. 1996. Alternate Grounds in the Interpretation of Deictic Expressions. In Fauconnier and Sweetser (eds.), 1996:227-261.
Rudzka-Ostyn, Brygida. 1985. Metaphoric Processes in Word Formation. The Case of Prefixed Verbs. In Paprotté and Dirven (eds.), 1996:209-242.
Ryuukyuu Hoogen Kenkyuu Kurabu 30 shuunen kinen kai, ed. 1987. *Ryuukyuu hoogen ronsoo* (Debates on Ryuukyuu Dialects). Ginowan: Ronsoo Kankoo Iinkai.
Sakata, Yukiko. 1992 [1971]. Shijigo Ko So A no kinoo nitsuite (Remarks on Function of Demonstratives *Ko, So*, and *A*). In Kinsui and Takubo (eds.), 1992:54-68.
Sakuma, Kanae. 1951. *Gendai nihongo no hyoogen to gohoo* (Expression and Grammar in Modern Japanese). Tokyo: Kurosio.

Satoo, Nobuo. 1992 [1978]. *Retorriku ninshiki* (Recognition of Rhetoric). Tokyo: Koodansha.
Saussure, Ferdinand de. 1959. *Course in General Linguistics*. New York: Philosophical Library.
Schalley, Andrea.C. 2004. Cognitive Modeling and Verbak Semantics: A Representational Framework Based on UML. Berlin: Mouton de Gruyter.
Schank, Roger C., and Robert P. Abelson. 1977. *Scripts, Plans, Goals, and Understanding: An Inquiry into Human Knowledge Structures*. Hillsdale, N.J.: L. Erlbaum Associates.
Senft, Gunter, ed. 1997. *Referring to Space: Studies in Austronesian and Papuan Languages*. Oxford: Clarendon Press.
Seto, Ken'ichi. 1995. *Kuukan no retorriku* (Rhetoric of Space). Tokyo: Kaimeesha.
Shankara Bhat, D. N. 2004. *Pronouns*. Oxford: Oxford University Press.
Shibatani, Masayoshi. 1985. Passives and Related Constructions: A Prototype Approach. *Language* 61:821-848.
———. 1990. *The Languages of Japan*. Cambridge: Cambridge University Press.
Shinohara, Kazuko. 2006. Kuukan ninchi jikken to jikan metafaa (Spatial Cognitive Experiments and Temporal Metaphor). In Yamanashi, Nishimura, Tsuboi, and Tsuji (eds.), 2006:1-40.
———. 2008. Jikan metafaa niokeru 'SAKI' no yoohoo to chokujiteki jikan kaishaku (The Usage of '*SAKI*' and Deictic Temporal Interpretation in Time Metaphor). In Shinohara and Kataoka (eds.), 2008:179-211.
———, and Kuniyoshi Kataoka, eds. 2008. *Kotoba kuukan shintai* (Language, Space and Body). Tokyo: Hitsuji.
Shooho, Isamu 1981. Ko, So, A no taikee (The System of *Ko, So,* and *A*). In Kokuritsu Kokugo Kenkyuujo (ed.), 1981:51-122.
Shopen, Timothy. 1985. *Language Typology and Syntactic Description*. 3 vols. Cambridge: Cambridge University Press.
Sohn, Ho-min. 1994. *Korean*. London: Routledge.
Strauss, Susan. 1993. Why 'This' and 'That' are not complete without 'It'. *Chicago Linguistic Society* 29:403-417.
Sunakawa, Yuriko. 2000. Kuukan kara jikan eno metafaa (Metaphor from Space to Time). In Aoki and Takezawa (eds.), 2000:105-142.
Suzuki, Kazuhiko, and Ooki Hayashi, eds. 1972. *Hinshibetsu bunpoo kooza 2: daimeeshi* (Lectures on Japanese Grammar based on Part of Speech: Pronouns). Tokyo: Meeji Shoin.
Sussex, Roland, and Paul V. Cubberley. 2006. *The Slavic Languages*. Cambridge: Cambridge University Press.
Suzuki, Takao. 1973. *Kotoba to bunka* (Language and Culture). Tokyo: Iwanami.
———. 1996. *Kyooyoo toshiteno gengogaku* (Language as Culture). Tokyo: Iwanami.
Sweetser, Eve, and Gilles Fauconnier. 1996. Cognitive Links and Domains: Basic Aspects of Mental Space Theory. In Fauconnier and Sweetser (eds.), 1996:1-28.
Taguchi, Shinya. 2010. Jikan hyoogen ni okeru 'KOkei shijishi' to 'Ima' ni kansuru ichi koosatsu (An Examination of "*ima*" and "*Ko*" in Time Expressions). In Conference Proceeding of Japanese Cognitive Science Society: 474-481.

Takahashi, Taroo. 1990. Shijigo no seekaku (Features of Demonstratives). *Nihongo gaku* 9:4-41.
———. 1992 [1956]. Bamen to ba (Deixis and Situation). In Kinsui and Takubo (eds.), 1992:38-46.
———, and Mitsuyo Suzuki. 1982. Ko So A no shiji ryooiki nitsuite (Remarks on Referential Fields of Japanese Demonstratives). *Kokuritsu Kokugo Kenkyuujo Kenkyuu Hookokushuu* 3:2-44.
———. 1989. Ko So A Do daimeeshi wa donnamono o sashiuruka (What Kind of Entity can Japanese Demonstrative Pronouns refer to?). *Kokuritsu Kokugo Kenkyuujo Kenkyuu Hookokushuu* 10:1-57.
Takayama, Yoshiyuki and Hirofumi Aoki, eds. 2010. *Gaidobukku Nihongo Bunpoo* (Guidebook to the History of Japanese Grammar). Tokyo. Hitsuji.
Takeda, Kanji. 1994. –Ko kee shijishi no bunmyaku tenkai no ruikee (Types of Changes of the *–ko* suffix of Demonstratives in Context). *Gengogaku Rongyoo* (13):61-75.
Takeuchi, Naoya. 2007. Koko made/kara, Ima made/kara no imiteki sooi ni tsuite (Semantic Difference of Japanese "*Kore-made/-kara*" and "*Ima-made/-kara*'). *Edward Sapir Kyookai Kenkyuu Nenpoo* 21:27-37.
Takubo, Yukinori. 1984. Gendai Nihongo no 'Basho' o arawasu meeshirui nitsuite (On Nouns referring to Places in Modern Japanese). *Nihongo Nihonbunka* 12:89-115.
———. 2010. *Nihongo no koozo: suiron to chishiki kanri* (Structure of Japanese: Inference and Management of Knowledge). Tokyo: Kurosio.
———, and Satoshi Kinsui. 1997. Discourse Management in terms of Mental Spaces. *Journal of Pragmatics* 28:741-758.
Talmy, Leonard. 1978. Figure and Ground in Complex Sentences. In Greenberg (ed.), 1978:627-649.
———. 2000. *Toward a Cognitive Semantics*. Vol. 1, *Language, Speech, and Communication*. Cambridge, Mass.: MIT Press.
Tamura, Suzuko. 2000. *The Ainu Language*. Tokyo: Sanseedoo.
Taylor, John R. 2003. *Linguistic Categorization.* 2nd ed. Oxford: Clarendon Press.
Teramura, Hideo, ed. 1993. *Teramura Hideo ronbunshuu 1* (The Collected Articles of Teramura Hideo). Vol.1. Tokyo: Kurosio.
———. 1993a [1968]. Nihongo meeshi no kaibunrui (Sub-classification of Japanese Nouns). In Teramura (ed.), 1993:3-20.
———. 1993b [1978]. Rentai shuushoku no shintakusu to imi-4 (Syntax and Semantics of Noun Modifying). In Teramura (ed.), 1993:297-320.
Tsuji, Yukio, ed. 2002. *Ninchi gengogaku kiiwaado jiten* (Dictionary of Keywords in Cognitive Linguistics). Tokyo: Kenkyuusha.
Turner, Mark. 1990. Aspects of the Invariance Hypothesis. *Cognitive Linguistics* 1 (2):247-255.
Uchima, Chokujin. 1987. Ryuukyuu hoogen niokeru Uchi/Soto ishiki (Consciousness of 'Inside'/'Outside' in Ryukyuu Dialects). In Ryuukyuu Hoogen Kenkyuu Kurabu 30 shuunen kinen kai (ed.), 1987:133-149.
Uehara, Satoshi. 1998. *Syntactic Categories in Japanese: A Cognitive and Typological Introduction*. Tokyo: Kurosio.

———. 2006. Toward a Typology of Linguistic Subjectivity: A Cognitive and Cross-Linguistic Approaches to Grammaticalized Deixis. In Athanasiadou, Canakis, and Cornillie (eds.), 2006:75-117.

Ueno, Tazuko, Isamu Shooho, Nozomu Tanaka, Tooru Hishinuma, and Shigeo Hinata. 1984. Nihongo to gaikokugo tono shouoo genshoo nikansuru taishoo kenkyuu (Contrastive studies of Anaphora between Japanese and Other Languages). *Kenkyuu Hookokusho* 79:199-275.

Webber, Bonnie L. 1991. Structure and Ostension in the Interpretation of Discourse Deixis. *Language and Cognitive Processes.* 6 (2):107-135.

Wierzbicka, Anna. 1987. *English Speech Act Verbs: A Semantic Dictionary*. Sydney: Academic Press.

———. 1996. *Semantics: Primes and Universals*. Oxford: Oxford University Press.

Wu, Yián. 2004. *Spatial Demonstratives in English and Chinese: Text and Cognition*. Amsterdam: John Benjamins.

Yamada, Yoshio. 1954. *Narachoo bunpoo shi* (A History of Grammar in the Nara Period). Tokyo: Hoobunkan.

Yamanashi, Masaaki. 2000. *Ninchi gengogaku genri* (Principles of Cognitive Linguistics). Tokyo: Kurosio.

———. 2004. *Kotoba no ninchi kuukan* (Cognitive Fields of Language). Tokyo: Kaitakusha.

———, Yoshiki Nishimura, Eejiroo Tsuboi, and Yukio Tsuji, eds. 2006. *Ninchi gengogaku ronkoo* (Studies in Cognitive Linguistics). Vol. 6. Tokyo: Hitsuji.

Yoshida, Shuuji. 1981. Shijishi ni mirareru kuukan bunkatsu no ruikee to sono fuhensee (Typology and Universals of Spatial Divisions by Demonstratives). *Kokuritsu Minzokugaku Hakubutsukan Kenkyuu Hookoku* 5 (4):833-950.

Yoshida, Tomohiko. 1993. Nihongo shijishi no chokuji yoohoo no shiyoo yooken (Conditions of Deictic Use of Japanese Demonstratives). *Tokyo Daigaku Gengogaku Ronshuu* 13:331-351.

Yoshimoto, Kei. 1986. On Demonstratives *Ko*/*So*/*A* in Japanese. *Gengokenkyuu* 89:48-72.