Syntactic Skewing Between English and Japanese: Quantification

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Declaration

I confirm that this thesis is my own original work.

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Abstract

This study makes a contribution in support of Jakobson's claim that "all cognitive experience and its classification is conveyable in any existing language", by investigating instances of semantic equivalence through syntactically-skewed formal correspondences between English and Japanese within the semantic area of quantification. In order to aid the systematic comparisons of equivalence, Halliday's notion of "category-shift", including "rank-shift" "class-shift" as well as Catford's notion of "level-shift", are used where appropriate.

The study looks into instances of formal correspondence beyond the framework of one-to-one correspondences of sentential elements, while drawing attention to the different motivation for formal representation—either grammatical or semantic/pragmatic. Through this approach the study analyses not only cases of complex skewing which are otherwise too opaque to compare, but also shows how notions which are generally thought to be absent in Japanese (such as definiteness vs. indefiniteness, bounded vs. unbounded, singular vs. plural, specificity vs. non-specific) are in fact also expressed in this language.

Instances of complex skewing of existential sentences in English and Japanese are investigated in the light of the notion of "rank-shift"—the mismatch between different ranks in a language such as morpheme, word, group, clause and sentence—and "class-shift"—the mismatch between words belonging to different word classes. Semantic equivalence of the existential sentence structure in both languages can not be investigated systematically without the aid of the notions of skewing.

The study also reveals instances of skewing which involve "level-shift", a shift between grammar and lexis. This notion enables us to see semantic equivalence between, on the one hand, the grammatical systems of count vs. mass and singular vs. plural in English and, on the other, the way in which how such notions are expressed by quantity expressions in Japanese, independently of the noun phrase.
Skewing which cannot be described within Halliday’s and Catford’s framework is also discussed where the differing syntactic positioning of a quantity expression reflects different semantic domains of specificity and indefiniteness in Japanese.

This study also suggests a new dimension of shift “motivation-shift”, which refers to differences in the motivations for formal representation in different languages. The study shows that while English obligatorily marks the divisions of bounded vs. unbounded and singular vs. plural, the representation of such divisions is restricted in Japanese and generally required only in order to maintain sentential and contextual coherence. The study points out that this kind of shift also contributes to the formal discrepancies between languages.
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1

Introduction

1. Introduction

This study investigates how English and Japanese, two genetically unrelated and typologically distinct languages, express the basic semantics relating to quantification, with particular attention given to the concept of "syntactic skewing". The term "syntactic skewing" refers to mismatches of form between non-corresponding word classes and syntactic elements (e.g. morphemes, words, phrases, clauses and sentences) within or between languages.

The basic semantic notions investigated include the divisions of boundedness vs. unboundedness, singular vs. plural, definiteness vs. indefiniteness and specificity vs. non-specificity.

In English, these notions are typically expressed in the noun phrase, using binary features such as the count vs. mass noun distinction, the singular vs. plural contrast, and definite vs. indefinite articles. On the other hand, it is generally considered that formal representations of these notions are absent in Japanese. This generalisation is based on the observation of the corresponding sentential elements, i.e. noun phrases. However, if we do not limit our observation to the comparison between noun phrases, we find that Japanese does express such notions, but in a different way. In Japanese they are often expressed NP-externally, neither grammatically nor in binary contrast, but lexically, using quantifiers and indefinite nouns.

Some of the findings suggest a new dimension to the notion of skewing in comparisons between typologically distinct languages, i.e.
skewing between grammatically enforced and semantic/pragmatically motivated representations. Further, at the language-specific level, the findings elucidate how the semantic dimension of specificity vs. non-specificity operates in Japanese, a topic which has not previously been given much attention. Finally, this study also sheds light on how the indefiniteness of aspectual notions is explicitly expressed in Japanese in the existential structure, which provides evidence for the widely accepted semantic correlation between indefiniteness and some aspectual notions.

In the remainder of this chapter, Section 2 will further clarify the term “syntactic skewing”, and Section 3 will explain why the semantic field of quantification was selected as the target of this study. Section 4 introduces the conceptual framework of the descriptive method used in the study. Section 5 sets out the organisation of chapters and, finally, Section 6 explains what kind of data sources were used and why.

2. Skewing

It is well known that there are diverse mismatches in surface expression among languages. In “On the linguistic aspects of translation” Jakobson states that there is no one-to-one equivalence among languages:

“On the level of interlingual translation, there is ordinarily no full equivalence between code-units.” (Jakobson 1992: 145)

While recognising various formal discrepancies among languages, Jakobson also claims that any language can express what another language can because we share the same cognitive foundation:

“All cognitive experience and its classification is conveyable in any existing language.” (Jakobson 1992: 147)
Givón (1978) also states that the universality of the human semantic base is confirmed through typological studies:

“This new-found universalism is more firmly grounded in the study of linguistic diversity and in particular of languages whose typological characteristics range far and wide of the standard Eurocentric fare.”

(Givón 1978: 235)

Thus we have basic semantic notions on the one hand and diverse representations across languages on the other. Mismatches of surface representation occur because semantic structures are organised differently in lexical and grammatical expression. Givón states:

“The great bulk of typological differences between languages involve the way in which they map their semantic structures onto surface expressions. This mapping involves two interdependent components that together mediate between meaning and signal: syntactic structure and lexical organisation.” (Givón 1978: 235)

Skewing constitutes a core problem in areas such as translation and second language learning, which are centrally concerned with the transfer of meaning.

When formal diversities are compared, often lexical inventories and syntactic structures are studied in isolation. Lexemes are usually compared based on their shared semantic components. Concerning the English and Japanese lexicon, Backhouse (1993: 87-94) provides examples which demonstrate different types of skewing which take place at the lexical level. For example, one term in English can be split into two lexemes in Japanese, such as water vs. mizu ‘cold water’ and oyu ‘hot water’ and give vs. kureru ‘give (to me, us, etc.)’ and ageru ‘(I/we, etc.) give’. In contrast, sometimes several terms in English are merged into
one lexeme in Japanese as with borrow, rent and hire vs kariru. Backhouse also exemplifies more complex networks of skewing such as between sets of cooking terms: toast, grill, barbecue, bake, roast and fry in English as opposed to yaku ‘cook by the direct application of heat (with or without a small amount of oil)’, itameru ‘stir-fry’ and ageru ‘deep-fry’ in Japanese. These are instances of skewing which occur between lexemes of the same word class.

However, there are many instances of skewing between the two languages which occur on the syntactic level, involving re-packaging of meaning across the lexical and syntactic levels of representation. Syntactic skewing occurs partly because languages differ in the way they package complex meaning into different syntactic units. For instance, the semantic complexity which English allows in some verbs must be expressed by a combination of verbs in Japanese:

(1) *I have brought* some wine.
(2) *Wain-o motte-ki-mashita.*

wine-ACC hold-come-POL-PAST

The English verb bring in (1) contains deicticity. In Japanese deicticity is explicitly expressed by combining the verb motsu ‘have’ and the verb kuru ‘come’.

Sometimes what is conveyed by a single verb in English may involve more complex skewing in Japanese as shown in the following two pairs of examples:

(3) *I suggested that he go and see a doctor.*
(4) *Kare-ni isha-ni itta hoo-ga 4*

he-DAT doctor-LOC go-PAST direction-NOM good
n ja-nai ka to itta.

NMLZ COP-NEG Q QUO say-PAST

‘Lit.: I said to him, “Wouldn’t it be better if you saw a doctor?”’

(5) I suspected that it was him.

(6) Kare janai ka to omotta.

he COP-NEG Q QUO thought.

‘Lit.: I thought, “Isn’t it him?”’

In (3) and (4), the meaning of the speech verb suggest in English is realised by two elements in Japanese, the basic speech verb ‘to say’ and ‘it is better if someone does something’ expressed as direct speech. In a similar way, in (5) and (6), the meaning of the verb which describes the mental process suspect in English is realised by two elements, the basic mental verb ‘to think’ and “isn’t it...?” expressed as direct speech. Although there are lexical equivalents for suggest and suspect in Japanese as dictionary entries, i.e. teigensuru and utagau, their use is stylistically restricted.

Sometimes an English prepositional phrase contains information which is too complex to be realised by a corresponding phrase in Japanese. Often what is conveyed by a prepositional phrase in English is expressed by a clause in Japanese:

(7) You will be able to sleep well with these tablets.

(8) Kono kusuri o nom-eba yoku nemur-e-masu yo.

this medicine-ACC drink-if well sleep-POT-POL SP

‘Lit.: If you take these tablets, you will sleep well.’
The prepositional phrase in English *with these tablets* is functioning as a "circumstantial element in a clause" (Halliday 1985) which is expressed by a provisional clause in Japanese.

Example (9) below shows that *many*, while syntactically linked to the head noun in the noun phrase in English, carries both quantitative value and existential meaning at the same time. On the other hand, the Japanese counterpart (10) shows that these two meaning components are conveyed separately by a quantity expression *takusan* and by an existential verb *iru*. Along with such skewing, the main predicate *eat octopus* in English is expressed by a noun modifying clause *tako o taberu* in Japanese:

(9) *Many Australians eat octopus.*

(10) *Tako-o taberu oosutoraria-jin mo takusan iru.*

octopus ACC eat Australians also many exist

‘Lit.: There are also many Australians who eat octopus.’

Sometimes, the lack of a grammatical category in one language can cause skewing. For instance, plurality is marked by a suffix *-s* on a noun in English as in (11) and (13) below. However, this grammatical concept in English can be expressed lexically by a quantifier in Japanese which occurs either outside the noun phrase, as in (12), or within the noun phrase, as in (14):

(11) *His blue down vest bore tiny rips.* (FPF)

(12) *Daun-no aoi besuto-ni-wa chiisana sakeme-ga ikutsuka atta.* (SK)

down-GEN blue vest-LOC-TOP small rip-NOM a few-CL existed
‘Lit.: There were a few small rips in the blue down vest.’

(13) We ... went to a small lounge tucked between rest rooms.

(FPF)

(14) Futa-tsu-no toire-no aida-ni
two-CL-GEN toilet-GEN between-DAT
hasam-are-ta chiisana raunji-e itta. (SK)

sandwich-PASS-PAST little lounge-LOC go-PAST
‘Lit.: (We) went to a small lounge sandwiched between two rest rooms.’

In these examples, redistribution of meaning does not occur between sentential elements which belong to the same word class as is the case with lexical skewing. Skewing in these examples is occurring on the syntactic level. Just as we cannot assume that there are one-to-one equivalences of meaning between two lexical items in different languages, so we cannot assume that there are one-to-one equivalences between syntactic elements and constructions. We will call this “syntactic skewing” in this study. In her textbook on translation, Larson (1991) draws attention to mismatches of syntactic structures as well as lexical skewing between languages:

“If there were no skewing, then all lexical items and all grammatical forms would have only one meaning; and a literal word-for-word and grammatical structure-for-grammatical structure translation would be possible. But the fact is that a language is a complex set of skewed relationships between meaning (semantics) and form (lexicon and grammar).” (Larson 1991: 9)
Chapter 1

Naturally, skewing is more prominent between unrelated languages such as English and Japanese, which are not only genetically unrelated but also reflect different socio-cultural contexts. However, if we are correct in assuming that "all cognitive experience and its classification is conveyable in any existing language", as Jakobson claims, we can go on to ask how basic semantics are packaged into such a diversity of lexical and syntactic forms as shown in examples such as the above. This question forms the foundation of this study.

In order to pursue this inquiry, we need to narrow the semantic scope of our examination. We also need a systematic method of describing syntactic skewing. Thus I have narrowed the scope of investigation to cases which involve quantification and have decided to use the set of concepts proposed by Halliday (1961) and Catford (1965) for description. Section 3 will explain why the semantic field of quantification was selected and Section 4 will introduce the conceptual framework of description used in this study.

Although this study examines formal mismatches between the two languages, it places primary emphasis on the way basic semantics are organised in Japanese structures which show syntactic skewing from their English semantic equivalents. Thus English words and structures are used more as a point of reference, and it is not the purpose of this study to examine the language-internal organisation of English in the same depth as that of Japanese.

3. Semantic field

The semantic conceptual field investigated in this study will concern quantification. This is because preliminary investigation has identified some interesting instances of skewing involving quantification which involves basic semantic divisions such as boundedness vs.
unboundedness, definiteness vs. indefiniteness vs. specificity vs. non-specificity. Our examination, however, will not be restricted to quantities of tangible things, such as objects (e.g. three pigs) and substances (e.g. a pint of beer). As Lakoff and Johnson (1980) point out, quantification extends to all areas of our experience:

"Understanding our experiences in terms of objects and substances allows us to pick out parts of our experience and treat them as discrete entities or substances of a uniform kind. Once we can identify our experiences as entities or substances, we can refer to them, categorise them, group them, and quantify them—and, by this means, reason about them. ... Our experiences with physical objects (especially our own bodies) provide the basis for an extraordinarily wide variety of ontological metaphors, that is, ways of viewing events, activities, emotions, ideas, etc., as entities and substances." (Lakoff and Johnson 1980: 25)

Thus, our examination of quantification extends to events, states and degrees. In the course of our examination we will show that basic semantic notions which are primarily associated with entities are also relevant in our understanding of temporal notions.

4. Method of description: Halliday and Catford

To compare languages such as English and Japanese systematically is a difficult task as the two langauges are typologically distinct. Examples of syntactic skewing between English and Japanese as given in Section 2, have thus often been dealt with as individual items, especially in relation to translation studies and language teaching (see Isshiki 1976; Ando 1986; Bekku 1991; Wakabayashi 1993). However, if we wish to examine them together as a class of related linguistic phenomena, we need a unified
method to compare them systematically and to use wherever such a method is reasonably applicable and useful.

The descriptive method proposed by Halliday (1961) and later modified by Catford (1965) for the purposes of translation theory is particularly useful for systematically describing syntactic skewing. The translation analyst Newmark (1991) notes this method as an invaluable tool for comparing two languages:

“Ever since the appearance of ‘Categories of the theory of grammar’ in 1961, followed by Catford’s (1965) A Linguistic Theory of Translation (which acknowledges its debt to Halliday and Firth) Halliday’s approach to linguistic phenomena that are at once formal and functional appears to me as a translation analyst (rather than theorist) to be more useful than Chomsky’s TG or the behaviourist Bloomfield’s immediate constituent analysis ... or any of the variants of artificial language or logic ...

...” (Newmark 1991: 65)

Newmark states from his experience that “most linguistic shift... can be described in this way” (1991: 66-7). As we are only concerned with syntactic skewing in this study, we will only make use of the concepts in Halliday’s and Catford’s theories which relate to the “formal level”, which concern lexis and grammar. The notions and terminology used in their descriptive theories which will be pertinent in the examination of this study are outlined below.

4.1 “Category-shift”

Halliday (1961) proposes that there are four fundamental categories in the theory of grammar, i.e. “unit”, “structure”, “class”, and “system”:

“If one asks: ‘why these four, and not three, or five, or another four?’, the answer must be: because language is like that—because these four, and no
other, are needed to account for the data. ... As the primary categories of the theory, they make possible a coherent account of what grammar is and of its place in language, and a comprehensive description of the grammars of language, neither of which is possible without them.” (Halliday 1961: 248)

Catford (1965: 73) states that translation shifts (skewing) happen because there occur “departures from formal correspondence in the process of going from the SL [source language] to the TL [target language].” According to their theories, formal discrepancies between languages can be described in terms of these four categories: “rank-shift” (Halliday) or “unit-shift” (Catford), “structure-shift”, “class-shift” and “intra-system-shift”. Let us examine each of these category-shifts below.

a. “Rank-shift” (Halliday) or “unit-shift” (Catford)

Halliday recognises five kinds of units in English grammar, i.e. morpheme, word, group, clause and sentence. Further he states that these units are arranged in a grammatical hierarchy, which he calls a “rank” scale. We can describe syntactic skewing between two languages using these concepts, i.e. one unit of a certain rank in one language does not always correspond to a unit of the same rank in the other language. This mismatch of units in terms of rank is called “rank-shift” by Halliday and “unit-shift” by Catford:

“Usually, but not always, there is sentence-sentence equivalence, but in the course of a text, equivalences may shift up and down the rank-scale, often being established as ranks lower than the sentence. ... Not infrequently, however, one cannot set up simple equal-rank equivalence between SL and TL texts.” (Catford 1965: 75-6)
For example, what is expressed by an adverbial phrase (or a "group") in one language sometimes may be expressed by a "clause" in another. In a more complex instance, what is expressed by one unit in one language may be expressed in more than one unit belonging to more than one rank in the other. Catford notes that the concept of unit (or 'rank') is a very important one, not only in theoretical linguistics but in many applications of linguistics including translation theory. As Catford rightly puts it, the concept of unit (rank) and unit-shift (rank-shift) will be the most useful in describing syntactic skewing. We will use Halliday's term "rank-shift" rather than "unit-shift" in this study as it seems to more explicitly convey the change of rank.

b. "Structure-shift"

Other categories can also undergo shift. A "structure" refers to "an arrangement of elements". For example, elements of structure at the "clause" level in English are, if we use Catford's terms, predicator, subject, complement and adjunct. Elements of structure at the "group" level are exemplified, say for a nominal group, by determiners, modifiers and heads in English. "Structure-shift" refers to cases where the order of such elements is changed. The position of a modifier in relation a head in French is considered to be a structure shift in comparison to English.

c. "Class-shift"

The "class" is a grouping of units. On the level of grammar it can be a group such as a verbal group or a nominal group. "Class shift" refers to cases such as where a verb in one language becomes a noun in another. Class-shift does not only occur between languages. The processes of class-maintaining as well as class-changing are examples of class-shift within a single language.
d. "Intra-system-shift"

"System" refers to a finite set of alternatives. In terms of grammar they refer to grammatical categories such as indefiniteness vs. definiteness in articles, the mass vs. count division of nouns, and present and past tenses in English. "Intra-system-shift" refers to mismatches of alternatives between two languages which possess corresponding grammatical categories.

4.2 "Level-shift"

In addition to the kinds of category-shift described above, Catford adds a new dimension to the concept of shift which he calls "level-shift". It refers to a shift between grammar and lexis which constitute the two aspects of the formal level. Level-shifts occur where a concept expressed through grammar in one language is expressed by a lexical item in another language. Thus, rank-shift between a morpheme and a word can also be viewed as a case of level-shift. Taking an example already mentioned, plurality is marked grammatically by a suffix in English, while it may be expressed lexically by a quantity expression in Japanese where necessary.

Although Halliday and Catford's theories go far beyond the concepts introduced above, these notions of shift between the levels of lexis and grammar and between categories of grammar are sufficient for the purposes of this study.

4.3 Anticipated problems

As Catford (1965) himself acknowledges, there has to be some degree of formal correspondence between two languages for the notion of category-shift to work:
"The concept of 'category-shift' is necessary in the discussions of translation; but it is clearly meaningless to talk about category-shift unless we assume some degree of formal correspondence between SL and TL; indeed this is the main justification for the recognition of formal correspondence in our theory. Category-shifts are departures from formal correspondence in translation." (Catford 1965: 76)

Naturally, we may expect difficulties applying the notion of category-shift to the comparison of two languages as distant as English and Japanese. Firstly, the whole notion of structure-shift would be problematic if we were to compare a language such as English, which has a fairly fixed word order on the one hand, with a language such as Japanese, which allows considerable freedom of word order on the other. Secondly, there are mismatches between the internal structure of the four categories themselves, especially where one language lacks a certain word class or grammatical category.

Furthermore, to make comparison between languages more complex, a certain kind of skewing takes place not only between languages but within a language. For example, class-shifts (change of word classes) also takes place within many languages, usually through derivational processes such as nominalisation, verbalisation, adjectivisation and adverbialisation:

"Many languages have special forms which make it possible to use an EVENT concept as a noun in the grammar. For example, in English, knowledge is a noun based on the EVENT concept know. Ability is a noun based on the concept to be able and full report is a noun phrase based on the concept to report fully." (Larson 1991: 58-59)
Larson (1991: 59) points out a stylistic reason for such skewing in English, it "adds dynamics and 'life' to the text. [It is] part of the style which makes a given text a work of art".

Nominalisation may be the most common shift of word class, and various reasons are given for why it takes place. For example, Larson (1991: 59) explains that nominalisation makes it possible for "the topic under discussion [to] be introduced by a noun". Langacker (1987a: 90) argues that nominalisation "necessarily endows [a verb] with the conceptual properties characteristic of nouns". Lakoff and Johnson (1980: 30) offer an explanation from a metaphorical point of view: "We use ontological metaphors to comprehend events, actions, activities and states. Events and actions are conceptualised metaphorically as objects".

The tendency for class-shifts within a language differ from language to language. For example, in Japanese there are systematic derivational process for nominalisation, adjectivisation, adverbialisation and verbalisation. However, what triggers class-shift is different from English. In particular, nominalisation by class-shift is more distinctly associated with style, and thus its use is much more restricted to formal or literary contexts. It is often pointed out that Japanese prefer verb-based expressions, while English allows nominalisation more often (cf. Yanagyu 1978; Yabe 1981; Anzai 1983; Ando 1986; Wakabayashi 1993). This different tendency for class-shifts can cause skewing between the two languages.

In the field of contrastive analysis between English and Japanese, either purely for linguistic examination or in its application to teaching and translation, researchers have tended not to take a methodological approach to comparison based on category shift (cf. Moori 1972). The reason may be due to the fact that these two languages are considered to differ too much to be compared within such a framework. However, it is
hoped that applying notions such as class-shift, rank-shift and level-shift will be useful in describing cases of formal discrepancies involving varying degrees of syntactic skewing.

5. Organisation

Chapters 2 and 3 will discuss basic semantic divisions which will be relevant in the later examination. Chapter 2 will introduce the basic semantic divisions of boundedness vs. unboundedness, singularity vs. plurality, and space vs. time in order to outline the semantic framework underlying our treatment of the notion of quantity in this study. Chapter 3 will examine the divisions of specificity vs. non-specificity and definiteness vs. indefiniteness.

In Chapter 4 we will briefly examine existing grammatical treatments of quantity expressions in both languages and point out what semantic notions are considered more or less relevant in the realisation of quantification in both languages.

In Chapter 5, we will argue that different positions of quantity expressions in Japanese syntactically reflect the domains of indefiniteness and specificity of the quantified entities. We will point out that this phenomenon skews with how English expresses such notions within a noun phrase.

In Chapter 6 we will examine complex syntactic skewing involved in the quantification of existential sentences.

In Chapter 7 we will extend the examination of Chapter 6 to the temporal dimension i.e. quantification of existence of situations.

In Chapter 8 we will investigate how the bounded vs. unbounded division for entities is expressed differently in both languages: in English it is expressed systematically within the noun phrase, while in Japanese it
is expressed lexically and often NP-externally through the semantics of classifiers.

In Chapter 9 we will discuss two additional functions of Japanese quantity expressions which represent syntactic skewing from English. One is that Japanese quantifiers are used to express plurality of entities, but only when such representation is motivated by semantic-pragmatic demands. The other is that Japanese quantity expressions can be used as anaphoric expressions, while placed NP-externally to the elided antecedent noun phrase.

In Chapter 10 we will discuss various further instances of skewing involving the notion of quantification and see how the semantic notions and descriptive concepts developed in this study can explain these. This is followed by a concluding chapter which summarises the main findings of the study.

6. Data sources

Attested examples from written texts and translations are used wherever possible.

Some examples were taken from original texts in one language which have been translated into the other. Three sets of original texts and translations were chosen, involving different directions of translation. *From the potter’s field/Shikei and Cause of death/Shiin* are examples in which an English text was translated into Japanese. *Utsukushisa to kanashimi to/Beauty and sadness* are examples in which a Japanese text was translated into English. Finally, *Sophie’s world/Sofii no sekai* are examples where both are a translation from a third language. The majority of examples were taken from the above sources.
Some attested examples were also taken from Japanese texts. I have given translations for such examples, which were then confirmed by bilingual informants.

Where attested examples are not available, I have provided examples. The grammaticality and naturalness of such examples were confirmed by several native speakers of Japanese.

Sources of attested examples are indicated in brackets. Japanese and English examples are often linked for comparison. In these instances, where necessary, a closer English translation in single quotation marks has been provided. In order to indicate which of the linked examples is from the original language and which is its translation, the source of the example in the original language is indicated in upper-case, and the source for the corresponding translation in indicated in lower-case. Examples which do not have source references are those that I have provided, unless otherwise stated.

A list of sources from which examples are taken is given below. Initials indicating each of the sources, which are placed in brackets at the end of all the attested examples throughout the study, are also given below. The same source may be indicated either in upper-case or lower-case such as _EN_ or _en_ for _Einichi Honyaku_ (English-Japanese Translation). This means that the source contains both English and Japanese texts; the initials in the different cases indicate whether the example is in the original language or in translation.

Chapter 1


2

Semantics of QUANTITY: the Divisions of Boundedness vs. Unboundedness and Space vs. Time

1. Introduction

This chapter establishes the framework for different interpretations of a semantic invariant which we shall call QUANTITY as a base for a comparison of the ways English and Japanese express the notions examined in this study. In establishing this framework, the chapter will examine the divisions of boundedness vs. unboundedness and space vs. time, as these form the basis for organising the examination of how QUANTITY is interpreted.

Section 2 introduces four types of "quantifiables" (concepts that can be quantified), i.e. entities, situations, quality of entities and quality of situations. We then demonstrate that the semantic invariant QUANTITY yields different quantitative interpretations; i.e. numeration and measurement (Section 3), iterativity, frequency and duration (Section 4) and degree (Section 5), depending on the interacting semantic divisions of the quantifiables, namely boundedness vs. unboundedness and space vs. time.

Section 6 shows that QUANTITY can be analysed as "positions on a scale of amount" (Leech and Svartvik 1975) across different semantic characteristics of the quantifiables and discusses how quantification is expressed by congruent structures (Halliday 1985) and by class-shifted structures. Section 7 briefly discusses two more characteristics of
QUANTITY which are relevant to our later examination, i.e. the numerical vs. non-numerical contrast and the partial vs. total contrast. This will be followed by a summary.

2. Quantifiabes

QUANTITY expressions in English such as "two", "some" and "many times" relate to other concepts, such as "apples", "water" and "going to the movies", respectively. In order to examine the framework of the semantics of QUANTITY, it is thus necessary to portray the semantic framework of the concept it occurs with. Sapir (1968: 123) uses the term "quantifiabes" to denote concepts that can be quantified and categorises them into four types: "existent" (e.g. house), "occurrent" (e.g. run), "quality of existent" (e.g. red) and "quality of occurrent" (e.g. gracefully). Nida and Taber (1969: 38) explain the abstractness of a quality such as red as nothing in or of itself but only an inherent characteristic of an object, which is conceptually abstracted and named as if it has separate existence. In a similar way, quickly is a quality of certain events. In this study, we will use the more generally used terms "entities" to refer to spatially-oriented quantifiabes (Sapir's "existent"), and "situations" as a general term to refer to temporally-oriented quantifiabes (Sapir's "occurrent"), which include states, events and processes:

"In discussing aspect, it is often necessary to refer to the differences between states, events, processes, etc. ... However, while ordinary nontechnical language provides, with a limited amount of systematisation, a metalanguage for these various subdivisions, it does not provide any general term to subsume them all. In the present work the term 'situation' is used as this general cover-term, i.e. a situation may be either a state, or an event, or a process." (Comrie 1976: 13) (See also Lyons 1995: 322 for a similar definition of "situation".)
We will adopt Comrie’s definitions of “states”, “events” and “processes” as subcategories of situations:

“States are static, i.e. continue as before unless changed, whereas events and processes are dynamic, i.e. require a continual input of energy if they are not to come to an end; events are dynamic situations viewed as a complete whole (perfectivity), whereas processes are dynamic situations viewed in progress, from within (imperfectivity).” (Comrie 1976: 13)

The major aspectual division of perfective and imperfective will also become relevant in our discussion. We will explain this division in terms of boundedness vs. unboundedness in Section 4.

Entities, situations, and qualities of entities and situations can all be quantified. We can talk about “how many” and “how much” of entities; “how many times”, “how long” and “how often” of situations, and “to what extent” of qualities of entities and situations. What divides entities from situations intuitively are the contrasting notions of space and time according to how we conceive our experience of the world in terms of a spatial or a temporal dimension. This contrast between space and time, together with the contrast between boundedness and unboundedness will form the basis for organising the examination of how QUANTITY is interpreted in this chapter. We will first look at how QUANTITY is conceived in terms of spatially-oriented concepts, and then how it is conceived in terms of temporally-oriented concepts.

We will use Sapir’s term “quantifiables” to mean concepts which can be quantified. For ease of discussion, unless “spatial” or “temporal”, or “bounded” and “unbounded” characteristics are emphasised, I will use “entities” to refer to spatially-oriented quantifiables and “situations” to refer to temporally-oriented quantifiables.

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Chapter 2

3. QUANTITIES of spatially-oriented quantifiables: "numeration" and "measurement"

One of the inherent semantic oppositions relevant in conceiving an entity is whether it is "bounded" or "unbounded". Weinreich (1963) states that this division is universal:

"Perhaps all languages distinguish between 'divided' and 'undivided' reference..." (Weinreich 1963: 161)

We will argue below (Sections 3, 4 and 5) that this semantic division is reflected in the interpretations of QUANTITY.

The boundedness vs. unboundedness division is manifested in the grammatical opposition of the count/mass contrast in English nouns:

"Count nouns, which can be counted (one pig, two pigs, several pigs,...), show the speaker as able to distinguish these items as separable entities....Mass nouns, on the other hand, are seen as continuous entities (much pork, *one pork, *few pork, ... ) and show the speaker as regarding these substances or concepts as having no natural bounds. They are subject to division only by means of certain 'gradability expressions'.” (Quirk et al. 1972: 130)

Many linguists and grammarians, however, have suggested that this semantic division is somewhat arbitrary. This arbitrariness is often exemplified by the pair oats and wheat. Wierzbicka (1985: 311-42) quotes from various linguists who point out this arbitrariness. For example:

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1 Allen (1966) notes that the term "bounded" was first used by Leonard Bloomfield in Language.

2 Weinreich uses the terms "divided" and "undivided", which were employed in Quine (1960).
---
"Class-meanings, like all other meanings, elude the linguist’s power of definition" (Bloomfield 1933: 266); "the distinction is somewhat forced upon our description of events by an unavoidable pattern in languages" (Whorf 1962: 140); and "these distinctions are grammatical and do not directly correspond to any categories of meaning" (Palmer 1978: 34-5). Other grammarians also discuss this arbitrariness (cf. Quirk et al. 1972: 130; Huddleston 1984: 245; Crystal 1991: 212; Kaplan 1995: 165).

However, Wierzbicka (1985) argues that the apparent arbitrary behaviour of English mass nouns is semantically motivated and convincingly puts forward the case that these ostensibly capricious grammatical behaviours are in fact evidence that grammatical forms sensitively reflect the conceptualisations intended by speakers:

"The fact that no absolute boundary can be drawn between countable and uncountable nouns shows not that countability is a shaky and capricious category, as has often been suggested, but quite the contrary: that it is highly sensitive to the intended conceptualization." (Wierzbicka 1985: 316)

From a cognitive point of view, Langacker (1987a) defines what count and mass nouns denote in terms of bounding and domains:

"a. A COUNT NOUN designates a region that is bounded within the scope of predication in its primary domain.
b. A MASS NOUN designates a region that is NOT specifically bounded within the scope of predication in its primary domain."

(Langacker 1987a: 63)

As Langacker’s (1987a and 1987b) explanation of bounding is thorough and systematic and relevant to our discussion, we need to briefly summarise his argument here. Langacker (1987a: 58-61) argues that
Bounding has a number of ramifications. Firstly, he states that bounding occurs in a particular domain or domains such as space, time, colour, visual field, and pitch. The domain in which physical objects such as bicycles are bounded is space, while a notion such as beep requires the domains of time and pitch for it to be bounded. On the other hand, blip and flash involve time, colour, space, and the visual field for bounding.

Secondly, Langacker points out that this division should be defined within the scope of predication: "Bounding WITHIN, not just BY, the scope of predication therefore appears to be pivotal for the count/mass distinction" (1987a: 60). For example, he argues that whether the speaker expresses a red region on a wall, in a predication I see NP, by a count noun or by a mass noun depends on the how the speaker is looking at this red region. If he is standing away from the spot and can see the region against the wall, then s/he sees it as a region with a boundary, thus bounded. In such a case he expresses it by a count noun I see a red spot. If he is standing very close to the red spot and cannot see anything else but a red sensation, then he sees it without a boundary, thus unbounded. In such a case, he expresses it by a mass noun I see (nothing but)/(a lot of) red.

Thirdly, Langacker states that bounding can be fuzzy: "Bounding implied by a count noun need not be precise or sharply defined" (1987a: 60). For example, he states that January and navel are more precisely bounded than seasons and midsection respectively.

Finally, he argues that bounding is virtual: "I must emphasize that bounding is a function of how we construe the conceived entity, and is not invariably motivated by objective consideration." (1987a: 60). For example, we can talk about abstract notions such as idea or experience as bounded and thus can pluralise them, as in a brilliant idea and many bad experiences.
Langacker further points out that bounding is only one factor that distinguishes count and mass nouns. Other factors are homogeneity, expansibility/contractibility and replicability (1987a: 64-8) He states that these factors are interdependent. Bounded entities such as bicycles and cats are viewed as composed of parts, and thus heterogeneous. On the other hand, unbounded entities such as water and air are homogeneous as they are internally uniform (see also Wierzbicka 1985: 315). Secondly, bounded entities, because of their internal heterogeneous structure, cannot be conceptually expanded or contracted. Unbounded entities are homogeneous and thus whether they are contracted or expanded their identity does not change. Finally bounded entities can be repeated while unbounded entities cannot. Langacker remarks that bounded entities can be incremented in discrete units because the boundaries serve to separate the individual units. Unbounded entities cannot be replicated because there are no boundaries to demarcate each unit.

The division of boundedness vs. unboundedness is relevant when talking about QUANTITY of entities. When we conceive of an entity as being "bounded", we think of QUANTITY in terms of "numeration" (e.g. two pens, many opinions). What about unbounded entities? Although a mass noun itself does not impose bounding, it does not mean that unbounded entities cannot be quantified. Langacker notes that the definition that a mass designates a region that is not specifically bounded only applies at the lexical level but not on the NP level or contextual level:

"The noun water profiles a substance of indefinite spatial expanse, but whether this absence of bounding survives at the NP level depends on other factors." (Langacker 1987a: 64)
He argues that water can be construed as generic in Water is the topic of her term paper, where there is nothing in the linguistic or contextual environments to suggest limitations. On the other hand, water in certain noun phrases can refer to a limited volume of the stuff. For example, it can be bounded by definite determiners and modifiers such as this water and the water in that pond; by quantifiers such as some water or a lot of water; or pragmatically such as I drank water with lunch yesterday.

Thus, when we think of QUANTITY of unbounded entities, which is a limited volume of that substance, we think of it in terms of "measurement".

Figure 1 below sketches the argument outlined above.

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**Fig. 1.** "Bounded"/"unbounded" contrast of "numeration" and "measurement" on the spatial axis

4. QUANTITIES of temporally-oriented quantifiables

4.1 Parallel between count/mass opposition and perfective/imperfective aspects

The division of boundedness vs unboundedness also divides our conception of quantifiables which are temporal in nature and thus yields
parallel temporal interpretations of QUANTITY, i.e. iterativity and duration.

The count/mass noun opposition mirrors the perfective vs. imperfective opposition in the temporal domain. Langacker (1987a & 1987b) convincingly argues the fundamental aspectual distinction between perfective and imperfective in terms of the bounded vs. unbounded division, and points out the systematic parallelism between the spatial and temporal oppositions:

"Various scholars (e.g. Mourelatos 1981) have noted a similarity between the perfective/imperfective (or active/stative) contrast for verbs and the count/mass distinction for nouns. I will go a step further, and claim that the perfective/imperfective and count/mass distinctions are precisely IDENTICAL, when due allowances are made for the intrinsic difference between verbs and nouns.” (Langacker 1987a: 80)

Langacker (1987b: 244) defines the perfective vs. imperfective opposition in terms of “whether the conceived situation is construed as changing during the course of its temporal profile”. By “temporal profile”, he means “the span of time during which [the] evolution [of a continuous series of states] is tracked”. As far as the classification of verbs is concerned Langacker remarks that his imperfective class is equivalent to Vendler’s (1967) “states” and his perfective class is Vendler’s other categories, i.e. “achievements”, “activities” and accomplishments”. However, Langacker considers the “progressive” form in English as “imperfectivization” (1987a: 84-89). Thus, on the level of predication (or within the predication), Langacker’s division of perfective and imperfective is in accord with the generally accepted definition of Comrie.
"The perfective looks at the situation from outside, without necessarily distinguishing any of the internal structure of the situation, whereas the imperfective looks at the situation from inside, and as such is crucially concerned with the internal structure of the situation." (Comrie 1976: 4)

Langacker argues that, just as space is the typical domain in which count vs. mass noun distinction is made in terms of bounding, time is the primary domain in which the perfective vs. imperfective distinction is identified in terms of bounding. He points out that an imperfective process is internally homogenous and expansible/contractible (like unbounded entities), while a perfective process is bounded in time within the scope of predication and replicability is possible (like bounded entities):

"Expansion or contraction does not affect the identity of a process if all its component states are identical (since any series of states is then qualitatively the same as any other). Internal homogeneity precludes distinctive initial and final states; it thus removes the most obvious basis for bounding, which is necessary for replicability. Moreover, indefinite expansibility/contractibility is incompatible with both bounding and replicability." (Langacker, 1987a: 81)

Such parallelism is also discussed in earlier studies by other scholars such as Allen (1966) and Leech (1969):

"Many Predications, of course, express Events that cannot be continued beyond a certain point; such Predications are always bounded. Conversely, so-called "states"—as opposed to "actions"—are almost always non-bounded". (Allen 1966: 202)
“This means, in grammatical terms, that not only noun meanings but verb meanings can include the factor ‘countability’. The contrast between ‘countable’ and ‘mass’, as applied to verbal meanings, is to be identified with the commonly drawn distinction between “event” verbs and “state” verbs (or rather senses of verbs). By relating this to the contrast between countable and mass nouns, we show how generalisation on a semantic level can bring together phenomena which are grammatically unconnected.” (Leech 1969: 134-5)

De Swart (1993) also refers to discreteness as a shared property of count nouns and events:

“Expressions like table, dog, book in the nominal domain and cross the street, come, win in the verbal domain are count-like. They have a number of properties in common, for instance that of referring to discrete entities (individuals or events) and of being countable. Mass-like expressions such as the nouns sand, water, flour and the predicates be in New York, be ill, swim, sing do not refer to individual entities, but to unbounded quantities of stuff and situations which lack endpoints. ... Mass nouns are unbounded with respect to space, while states are unbounded in their temporal dimension.” (de Swart 1993: 125)

If bounding cuts through the space and time dimensions, QUANTITY of situations should thus reflect the parallel characteristics of “numeration” and “measurement” of entities. Let us examine first how bounded situations can be counted. Although singularity and plurality of bounded situations may not be grammatically marked in verbs in English, this contrast is translated by what Comrie (1976: 42) defines as ‘semelfactive’: “a situation that takes place once and once only (e.g. one single cough)”; and ‘iterative’: “a situation that is repeated (e.g. a series of coughs)".
Thus, situations can be marked explicitly with semelfactive and iterative expressions such as *once, twice, many times, and again and again*. I will use "iterative" expressions to refer to both semelfactive and iterative expressions in this study: all involve the numeration of situations.

Note that Leech (1969: 125) points out that iterativity has two interpretations, i.e. 'plurality of times' and 'plurality of events'. He notes that a sentence such as *He knocked on the door three times* can be interpreted in two ways: (a) *He gave three knocks on the door* and (b) *He knocked on the door on three occasions*. The former denotes "plurality of times", i.e. "more than one event on the same occasion" and the latter, "plurality of events", i.e. "more than one event on more than one occasion".

Let us see how situations construed as unbounded can be measured. Just as a limited volume of unbounded entities can be expressed by a measuring unit such as *a glass of milk*, so can unbounded situations be measured in a similar fashion. De Swart states: "Unbounded stuff and situations are expected to accept measurement phrases and not to combine with cardinal numbers" (1993: 125). For example, when we talk about a state, we express it in terms of the length of time during which the state continues such as *I was sick for two weeks* or *I was in New York for a day*. We express this kind of QUANTITY as duration. This means that measurement and duration are contrasting projections of a limited QUANTITY of unbounded quantifiables in the spatial and temporal dimensions respectively, and that there is a parallel between QUANTITY expressions such as *I had two glasses of milk* and *I was sick for two weeks*.

Figure 2 below shows the bounded vs. unbounded contrast on the temporal axis.
Fig. 2. "Bounded" vs. "unbounded" contrast of "iterativity" and "duration"

We should note that the perfective and imperfective contrast discussed here should be understood not on the lexical level of what verbs typically represent but within the predication, just as in the case where a red spot on the wall is interpreted either as bounded or unbounded. The same phenomenon is observed in the temporal domain. This means that although there is inherent unboundedness in durative verbs such as work or read and stative verbs such as want and like, this does not mean that these verbs are always viewed as unbounded. This point has been discussed by many scholars. For example, although Garey (1957) initially proposes a division of verbs into "telic verbs"—verbs which express an "action tending towards a goal" and "atelic verbs"—verbs which "do not have to wait for a goal for their realisation, but are realised as soon as they begin", he later points out that
the same verb can have many meanings depending on the grammatical environment. He gives an example of "to play":

If there is a direct object, and if this object designates something that has a structure with a temporal ending to it — [play] a game of chess or of tennis, a Beethoven sonata — the expression verb-plus-object is telic. In the contrary case, if the complement of the verb is atelic ... or if there is no object ... the expression is atelic. (Garey cited in Allen 1966: 198)

Allen (1966) argues that what is considered as bounded or unbounded in the temporal dimension is not the verb itself but the whole predication:

“It would appear, then, that it is not so much the verb itself which is telic or atelic, but rather the kind of Predication in which the verb participates. (...) If we substitute the terms “bounded” and “non-bounded” for Garey's ‘telic’ and ‘atelic’, and use “bounded” not for verbs but for Predications, we can avoid calling the same item both “bounded” and “unbounded”: thus the Predication are playing a rubber of bridge (like the nominal a cake in the sentence I've bought a cake for your birthday) is bounded, whereas the Predication are playing bridge (like the nominal cake in the sentence I like cake) is non-bounded.” (Allen 1966: 198)

Furthermore, Comrie (1976) states that the same situation can be viewed as either bounded or unbounded:

“The difference between perfectivity and imperfectivity is not necessarily an objective difference between situations, nor is it necessarily a difference that is presented by the speaker as being objective. It is quite possible for the same speaker to refer to the same situation once with a perfective form, then with an imperfective, without in any way being self-contradictory.” (Comrie 1976: 4)
Taking de Swart’s example, once states such as “being sick” or “being in New York” as a whole are conceived of as having bounds, i.e. as having beginnings and endpoints, it becomes possible to talk about a plurality of them:

“In the temporal domain, unboundedness can be interpreted as a lack of (or an abstracting away from) a beginning and an endpoint. But states and processes are not always presented in the perspective of unbounded situations. In many contexts, states or processes are described as situations that come about, hold for a while and then end.” (de Swart 1993: 125-6)

Bartsch (1985) explains this dual perspective of states, saying that there are two perspectives on viewing states and processes, namely ‘closed’—“the view from outside the situation” and ‘open’—“the view from within the situation”:

“In Bartsch (1985), the two perspectives on states and processes are related to two ways of representing a situation. There is a view from outside the situations: here one does not take note of the internal properties of an event, act or occurrence. The perspective represents the situation as ‘closed’ (i.e. the endpoints are included) and it is used when we make assertions about relationships a situation has with other situations. Adopting the view from within the situation, one takes note of an event, the performance of an act, or the stative properties of an occurrence. This perspective represents a situation as ‘open’ (i.e. the endpoints are not considered) and it is used when one wants to talk about internal properties, such as the quality of the process, or the way in which something takes place or is performed.” (de Swart 1993: 126)
Thus if states or processes can be viewed from the inside as well as the outside, it is possible for duration and iterativity to coexist in a stative predicate statement, as Leech (1969) points out:

"Adverbials of duration tend to occur with state predications, but this tendency must be treated as a factual likelihood rather than a semantic rule (…), since it is possible for adverbials of duration and adverbials of frequency to co-exist in sentences like He often waited for ten minutes."

(Leech 1969: 136)

We have shown in the sections above that the interacting divisions of boundedness vs. unboundedness and spatial vs. temporal give rise to different interpretations of QUANTITY: numeration expresses QUANTITY of bounded spatial quantifiables, while iterativity expresses QUANTITY of bounded temporal quantifiables. In the same way, measurement expresses a limited QUANTITY of otherwise unbounded spatial quantifiables, while duration expresses units of otherwise unbounded temporal quantifiables. The figure below depicts these contrasts:

![Figure depicting contrasts](image-url)
4.2 Habitual aspect and frequency

A brief explanation on the meaning of "frequency" is necessary at this point. (Later we will examine instances where spatially-oriented expressions become interchangeable with frequency expressions.)

Frequency adverbs such as *occasionally* and *often* appear to be similar to iterative expressions such as *a few times* and *many times* in the sense that they describe the repetition of a situation and have temporally-oriented quantitative meaning. Iterativity assumes a perfective aspect of events as it counts them, viewing each event from outside its boundary. Frequency, on the other hand, is related to habitual aspect. Thus, in order to clarify the difference between what is expressed by iterative expressions and frequency adverbs and to show how the notion of frequency relates to our framework of different interpretations of QUANTITY discussed so far, we need to explain the difference between iterativity and habituality.
Brinton (1988: 53) defines habitual as a situation "repeated on different occasions, as distributed over a number of times" and Dahl (1985: 97) defines habitual sentences as involving "quantification over a set of occasions which is given explicitly or by context". However, Dahl (1985: 97) points out that the number of times is irrelevant in the habitual: "the difference between 'once' and 'twice' or even 'seven times' is almost totally irrelevant to [the habitual] ...". Comparing iterativity and habituality in the light of repetition of situation, Comrie (1976: 27) argues that they differ in two aspects. Firstly, he notes that although habituality often concerns the repetition of a situation like iterativity, "mere repetition of a situation is not sufficient for that situation to be referred to by a specifically habitual form". He gives the example of a situation in which a lecturer coughs five times before delivering a lecture. He remarks that "coughing five times" is a repeated event but is not conceived as habitual and thus cannot be expressed by the past habitual form in English, He used to cough five times. Secondly, he argues that habituality does not always involve iterativity, giving the example the Temple of Diana used to stand at Ephesus. Habituality may involve iterativity but it is not always the case.

Comrie explains why the notion of iterativity sometimes becomes relevant in the interpretation of habituality, and sometimes not, in the following fashion. In Comrie's aspectual hierarchy based on perfectivity vs. imperfectivity as the principal opposition, habitual and continuous are subcategories of imperfective. Habitual is imperfective in the sense that it describes an internally homogenous situation which extends over a period of time. Comrie states that habitual describes a "situation which is characteristic of an extended period of time, so extended in fact that the situation referred to is viewed not as an incidental property of the moment but, precisely, as a characteristic feature of a whole period"
Chapter 2

(Comrie 1976: 27-8). He explains that if a particular situation can be protracted indefinitely in time, the interpretation of iterativity is not involved, as in the case of the Temple of Diana used to stand at Ephesus. In contrast, if the situation cannot be protracted indefinitely, as in the case of “coughing”, then the interpretation of iterativity becomes relevant.

Intuitively, however, when habituality involves the interpretation of iterativity, it involves perfectivity of the repeated instances of a situation, the occurring pattern of which characterises the whole period. This dual characteristic of habituality, i.e. perfective and imperfective, is pointed out by Langacker (1987a):

“Moreover, there are patterns of semantic extension which effect a change in category without marking it overtly—e.g., a perfective can be construed as habitual, and hence imperfective.” (Langacker 1987a: 79)

Comparing habitual with progressive aspect, Frawley (1992) also argues that the difference between the two can be explained by the notion of “extendedness”:

“Both progressive and habitual aspect involve extendedness: the former extends from within the event, the latter from without.” (Frawley 1992: 332)

The view of a situation from without, of course, is the major characteristic of perfectivity.

Now in what way is frequency related to habituality, and how does it differ from iterativity? Leech (1969) explains frequency in an analogy with distance and speed:

“[J]ust as speed is a function of distance and time, so is frequency a function of length of period and number of times.” (Leech 1969: 126)
He states that there are two different types of measures for describing frequency. One is "a simple undifferentiated scale of existential quantification ('rarely'/ 'occasionally'/ 'often', etc)" and the other is "plotting happenings against periods of time ('once a week', 'three times a year', etc)" (1969: 127). The former interpretation of frequency strongly associates with habituality. Thus *He often eats out* and *He occasionally eats out* describe different intervals between which a situation repeats within an unspecified but extended period of time. On the other hand, iterativity outside the scope of habituality simply denotes the total number of instances in which the same situation occurs such as *He ate at the restaurant seven times*. The interval between each occasion is irrelevant.

Another characteristic of frequency is regularity. It has been suggested that situations are distributed along the temporal axis at regular intervals or cyclically (see Stump: 1981). Thus, unless a certain kind of situation occurs with some regularity, we do not perceive the phenomenon in terms of frequency. On the other hand, iterative expressions do not necessarily assume a regular distribution over time.

As the aspectual characteristics of habituality are themselves complex, involving both the bounded (perfective) and unbounded (imperfective) division, the framework of interpretations of QUANTITY suggested so far cannot accommodate the quantitative characteristics of frequency. At the moment, however, it suffices simply to have drawn attention to the similarities and differences between the quantitative characteristics of iterativity and frequency.

5. QUANTITIES of quality of spatial and temporal concepts: degree

Some quantifiables do not occupy either spatial or temporal locations, i.e. "quality of entity" such as *red* and "quality of occasion" such as *gracefully*:
“Different examples of ‘red’ similarly exhibit ‘mores’ and ‘lesses’ with respect to intensity, size of surface or volume characterised as red, and degree of conformity to some accepted standard of redness. And ‘gracefully’ is quite unthinkable except as implying a whole gamut of activities which may be arranged in a grade series of the score of gracefulness.” (Sapir 1968: 123-4)

These quantifiables are intrinsically unbounded. When it comes to their QUANTITY, they behave in a parallel way to that of unbounded spatial or temporal quantifiables. We interpret the QUANTITY of these quantifiables as degree (e.g. The temperature is 30 degrees, His face is a little red or He turned down the offer very gracefully). We can now see the parallel between the QUANTITY of unbounded quantifiables in the space, time and non-spatial/non-temporal dimensions:

Fig. 4. Parallelism of QUANTITY of “unbounded” quantifiables
6. Cross-categorical interpretation of quantitative values

6.1 “A scale of amount”

We can apply the concept of “scale of amount” (Leech and Svartvik, 1975) to cross-categorical interpretations of QUANTITY. Leech and Svartvik observe that there is a parallel between the class of “amount words” for count nouns (e.g. few, a few, many) and for mass nouns (e.g. little, a little, much) and that “we can order amount words roughly on a scale, moving from the inclusive towards the top, to the negative words at the bottom ...”. (1975: 67). They extend this parallelism to other word classes such as pronouns and adverbs:

“Positions on a scale of amount can be expressed not only through the words already discussed (which are determiners or pronouns) but the pronouns like everybody, everything, and by adverbs of frequency, duration, etc.”

(1975: 68)

Representing this phenomenon in a semantic framework, we obtain a figure such as the following:
Fig. 5. Cross-categorical parallelism of QUANTITY

This means that a QUANTITY at a point towards the outer end on the scale of amount can be expressed with English lexemes such as *many*, when we are talking about bounded spatial quantifiables; *much*, when we are talking about unbounded spatial quantifiables; *many times* and *often*, when we are talking about bounded temporal quantifiables; *(for) a long time*, when we are talking about unbounded temporal quantifiables, and *very* or *very much* when we are talking about the quality of unbounded spatial and temporal quantifiables. In the same way, words such as *a few*, *a little*, *occasionally*, *(for) a little while* and *slightly* are comparable. Cushing (1982), who considers notions such as “things in general”, “locations”, “persons”, “times”, “processes” and “states” as all quantifiable, also states that the same quantitative value is expressed in different word classes in English:
“Quantifier meanings are typically expressed in English by determiners, but there are certain cases in which they can be expressed by pronouns or adverbs instead.” (Cushing 1982: 15)

This study adopts the notion of scale of amount across different types of QUANTITIES and its manifestation in different word classes.

6.2 Congruent structures of quantification

The correlation between the grammatical categories of noun and verb and entities and situations has been pointed out by many scholars (see Givón 1984; Haiman 1985; Langacker 1987a; Wierzbicka 1985; Hopper & Thompson 1985). Nida and Taber (1969) state that there is a kind of “fit” between basic semantic categories and certain word classes: “For instance, objects are most typically expressed by nouns or pronouns, events by verbs, and abstracts by adjectives and adverbs” (Nida & Taber 1969: 38). The notion of quantity is semantically subordinate to that of the quantifiable. Thus, when a quantifiable is expressed in a typical word class, its associated quantity is also expressed in a typical word class which reflects its semantic relation to the quantifiable. Taking English examples for instance, when an entity is expressed by a noun its quantity expressions appears pre-nominally within the noun phrase:

(1) *The boy ate* **three** hamburgers.

(2) *The boy drank* **a glass of** milk.

When a situation is expressed by a predicate, iterativity, frequency and duration are expressed adverbially:

(3) *I went to Kyoto* **twice** when I was in Japan.

(4) *I went to Kyoto* **often** when I was in Japan.
(5) *I slept for a while.*

Degree is typically expressed by an adverb:

(6) *He is very strong in this field.*
(7) *He recovered very quickly*

Halliday (1985) uses the term “congruent” to refer to sentence structures which are ‘literal’ to the semantic configuration. The above examples are cases of congruent structures where basic semantic categories are expressed by typical word classes.

6.3 Class-shifted structures of quantification

When the word class of the quantifiable is class-shifted, the word class of its quantity expression is class-shifted as well. When an event, which is typically expressed by a verb, is expressed by a noun, its iterativity, frequency and duration will appear as a sentential element closely associated with a noun:

(3) *I went to Kyoto twice when I was in Japan.*
(3)' *I made two visits to Kyoto when I was in Japan.*

(4) *I went to Kyoto often when I was in Japan.*
(4)' *I made frequent visits to Kyoto when I was in Japan.*

(5) *I slept for a while*
(5)' *I had some sleep.*
Quality of entities such as strong, which is an adjective, may appear as a noun strength, consequently changing the word class of its quantity expression:

(6) He is very strong in this field.
(6)' He has a lot of strength in this field.

In Section 4 of Chapter 1, we pointed out the metaphoric and stylistic motivation of nominalisation. We also pointed out that the tendency for class-shift is different from language to language.

7. Other characteristics relevant to QUANTITY

Below we will point out two other characteristics relevant to the interpretation of QUANTITY.

7.1 “Numerical” vs. “non-numerical”

QUANTITY can be expressed by numerical expressions (e.g. one, two, one hundred) which denote absolute values, or non-numerical terms (e.g. a few, some, many). This distinction applies across the different interpretations of QUANTITY which we have examined. We can talk about numeration in terms of numerical QUANTITY or non-numerical QUANTITY as in five students vs. many students; measurement as in two glasses of milk vs. some milk; iterativity as in seven times vs. many times or often; duration as in two hours vs. a little while; degree as in five degrees Celsius vs. a few degrees.

Unlike numerical quantity expressions, non-numerical quantity expressions do not represent an absolute value; their positions can only be placed relative to each other, and their values are highly context-dependent. For example, Leech and Svartvik (1975: 64) state that words
such as *many* and *a few* are amount words which “specify more precisely the meaning ‘some’” and they categorise amount words other than *some* into three groups: words which denote “a large amount” such as *many, a lot, much*, etc; “a small amount” such as *a few, a little*; and “not a large amount” such as *not many, little, few* etc. Sapir (1968: 123) explains that *many* is used when the speaker considers a quantity to be “more than some number taken as a point of departure” and Keenan and Stavi (1986: 258) explain the relative quantitative value of *many* as more “significant” than the norm.

### 7.2 “Partial” vs. “total”

*QUANTITY* can often be conceived in relation to a specific whole such as *some of the stars, all of the cake, half of it, three of them, none of the land*, etc. The notion of part of a specific whole also applies across the temporal dimension such as *three times out of five* (iterative) and *two hours per day* (duration).

Non-numerical quantity expressions can be seen as part of a collection. Frawley (1992) explains the difference between expressions such as *many* and *a few* in contrast to *all, every* and *each* in terms of *partial vs. total* quantities. He remarks that the former denote quantity “by essential reference to some other members of the collection” while the latter denote quantity “by means of no reference to other members of the collection” (Frawley 1992: 467). The collection, however, may or may not be clearly defined in the immediate context. Leech and Svartvik (1975: 65-6) state that words such as *many* can be viewed either in terms of a definite ‘total’ or ‘sphere’, or in terms of when the ‘sphere’ is unlimited. For example, *many* in *many of them*, expresses a large part of a certain definite whole, and *a few* in *a few of those* expresses a small part of that definite whole. On the other hand, they argue that these same words can
be used without any reference to a definite whole in examples such as *Many people derive much pleasure from attending music festivals* and *There were fewer cars in those days.* Leech and Svartvik call the latter use "the general (indefinite) use of amount words" (1975: 65). In this case, although they view the quantitative value of *many* in relation to an "unlimited sphere" or "without any reference to a definite whole", in a more general sense we still conceive of a total, which may be a collection such as humanity as a whole, the people of this city, etc.

8. Summary

This chapter has described the cross-categorical parallelism of QUANTITY within the semantic framework adopted. It has demonstrated that notions such as numeration, measurement, iterativity, duration, frequency and degree are interpretations of QUANTITY, and that such different interpretations arise because the basic semantic invariant is interpreted differently depending on the semantic characteristics of the concepts it is associated with. The relevant interacting semantic characteristics of the referents which yield such different interpretations have been identified as the contrasts between space vs. time, and boundedness vs. unboundedness.

We have demonstrated that a "scale of amount" runs across such semantic parallelism, yielding words expressing different positions on this scale in different word classes. We have also pointed out that the semantic relationship between a quantifiable and its QUANTITY can be expressed either congruently or in a class-shifted structure.

Two more characteristics of QUANTITY have been discussed: the contrast between numerical vs. non-numerical and that between partial vs. total quantity.
We have also observed that the categorisation of quantifiables as "bounded" or "unbounded", either spatially or temporally, is determined by our immediate experience. Therefore, the same entity or situation can be expressed either as bounded or unbounded depending on our construal.
3

Divisions of Specificity vs. Non-specificity and Definiteness vs. Indefiniteness

1. Introduction

Examinations in Chapters 5 and 7 in particular assume an understanding of the divisions of specificity vs. non-specificity and definiteness vs. indefiniteness. Below we will give an overview of how such divisions have been examined with regard to the characteristics of noun phrases in English. The overview will, however, be limited to those aspects of the topic which are relevant to this study.

2. Specificity vs. non-specificity

The opposition between specificity and non-specificity is generally understood as follows: a noun phrase is interpreted as specific when the speaker has a particular entity in mind and as non-specific when the speaker does not have particular entity in mind (see Partee 1972: 415; Ioup 1977: 234; Hawkins 1978: 204). Givón (1984: 399) argues that a specific (which he calls "referring") entity concerns the uniqueness of the referent in terms of its individuateness and accessibility in the speaker’s mind. This naturally assumes that the speaker has to be committed to the existence of a particular entity in the universe of discourse for the entity to be specific. The presumed existence which we are talking about is in the "universe of discourse" (Givon 1984: 390) or the "speaker’s reality space" (Haspelmath 1997: 110) and is different from existence in the real world. Givón states that "unlike in logic, in human language speakers and
hearers negotiate the scope of the particular universe they talk about, and also establish the identities of individuals they intend to take for granted as existing within that universe" (1984: 390). For example, an entity such as a *unicorn* can exist in the universe of discourse, although it does not in the real world. In contrast, when we say that the entity is non-specific, the speaker is not committed to identifying a particular entity in the universe of discourse.

Some languages express this division of (non-)specificity regularly. Haspelmath (1997) points out, in his cross-linguistic study of indefinite pronouns, that the division of specificity and non-specificity is one of the determinants in some languages which motivate the choice between different series of indefinite pronouns. He remarks that languages such as Russian, Lithuanian and Modern Greek use specific and non-specific marking. Enç (1991) remarks that in Turkish an object is unambiguously interpreted as specific when it is accompanied by an accusative case morpheme.

English noun phrases lack regular binary coding of the division of specificity vs. non-specificity. For example, an indefinite noun phrase such as a *person* below may have either specific or non-specific interpretations:

\[(1) \text{ Tom wants to marry a person who speaks Japanese.}\]

A *person* may refer to a particular entity whom the speaker has in his mind, and he is committed to the existence of the particular Japanese person. In such a case it is a specific referent. On the other hand, a *person* may not refer to anyone in particular as long as whoever it is speaks Japanese, and the speaker is not committed to identifying any particular Japanese person. In this case it is a non-specific referent.
It has been pointed out that whether a noun phrase is specific or non-specific in English can been syntactically tested. Firstly, adjectives such as *certain* and *particular* explicitly express the specificity of an entity (see for example, Enç, 1991).

(2) *Sam met a certain Japanese girl* [specific/*non-specific].

Secondly, Karttunen (1976) argues that only specific NPs can have a “discourse referent”, i.e. only specific NPs can be referred to anaphorically in a present indicative clause such as the one below:

(3a) *Sam bought a computer* [specific]. *It is powerful.*

(3b) *Sam wants to buy a computer* [non-specific]. *It is powerful.*

A *computer* in (3a) refers to a particular computer and thus can be referred to anaphorically by *it*. A *computer* in (3b) does not refer to any particular one and thus cannot be referred to anaphorically by *it*. Note, however, that *it* can be used to refer to this non-specific computer it if is used in the same irrealis context, as in *Sam wants it to be powerful* (see Haspelmath 1997: 108). Lastly, Heringer (1969) points out that only specific NPs can be paraphrased with an existential sentence:

(4a) *There is a Japanese girl* [specific] who *Sam wants to marry*. *He met her at the party a month ago.*

(4b) *There is a Japanese girl* [non-specific] who *Sam wants to marry because he likes Japan.*

Although there is no formal binary distinction in English which expresses this division as in the case of the indefinite and definite noun
phrase division, the specific and non-specific division is reflected in the choice of indefinite articles in English such as a(n), some, any and no (see Bolinger 1977: 21-36; Hawkins 1978: 172-227; Givón 1993: 216-24). For example, Givón (1993: 216-24) points out that NPs marked by a(n) may be interpreted as either specific or non-specific, while any and no code only non-specificity. Some can be interpreted as either specific or non-specific (see also Lyons 1977: 455). However, compared to a(n), some is more likely to be interpreted as non-specific. Thus some is located between a(n) and any on the scale of possible interpretation of specificity vs. non-specificity. The same scale applies to the specific vs. non-specific interpretation of the English indefinite pronouns something, anything and nothing.

Givón (1993: 224-5) further points out that in addition to the choices of indefinite article, the English noun phrase codes a gradation of specificity by combining other devices such as the specific nature of the noun itself and the presence of restrictive modification. He lists the following set of sentences to show the differing degree of specificity from low to high:

(5a) Did you see anything there?
(5b) Did you see anybody there?
(5c) Did you see any man there?
(5d) Did you see some man there?
(5e) Did you see a man there?
(5f) Did you see a tall man there?
(5g) Did you see a tall man wearing a blue shirt there?

The indefinite article any is associated with non-specific reference compared to some, followed by a, as can be contrasted in (5c), (5d) and (5e). The more specific the inherent characteristics of a noun are such as a man
compared to *a thing*, the more likely the noun is to have a specific reading. Further, the presence of restrictive modification in (5f) and (5g) increases the likelihood of the specific reference of *a man*. The degree of specificity is naturally higher in the indefinite noun phrase with restrictive modification as the extra information carried in the modification helps to narrow down the conceptual domain of an entity so that it can be more uniquely identified. Givón (1993: 225) remarks that such a gradation proceeds along 'psychological' or 'probabilistic' dimensions. In other words, "How strongly does the speaker intend to suggest that they are referring to a particular individual?" and "What is the probability that the individual that the speaker referred to is a specific individual?". Let us elaborate what he means by these two dimensions further by taking the case of a singular vs. plural noun phrase contrast and the (non-)specific interpretations.

As far as the internal characteristics of noun phrases are concerned, plurality also influences the interpretation of specificity:

(6a) John was looking for *a pen*.
(6b) John was looking for *pens*.

Givón (1993: 226) comments that the probability of a specific interpretation of *a pen* in the irrealis context in (6a), in which the indefinite noun phrase is singular, is higher than *pens* in (6b). In terms of speaker intention, he remarks that the speaker can deliberately choose either a singular or plural noun phrase as a device in order to imply a specific or non-specific interpretation of the entity in English.

Not only the features within the noun phrases, but modalities of propositions as a whole as well as the inherent characteristics of verbs have been observed to pertain to specificity. Fodor (1970) argues that
specificity is not an inherent property of the noun phrase in English but is induced by linguistic contexts such as tense. In a wider sense, Givón (1984 1993) states that modality relates to specificity:

"(a) under the scope of fact modalities, noun phrases can only be interpreted as referring [specific]; (b) under the scope of non-fact modalities, noun phrases may be interpreted as either referring [specific] or non-referring [non-specific]." (Givón 1993: 216)

Interestingly, Haspelmath's (1997: 37-45) cross-linguistic observation also confirms that moods of the proposition relate to different choice of indefinite pronouns, and that the specific vs. non-specific division is related to the propositional characteristics. He notes that there are three types of contexts in which indefinite noun phrases are allowed: in the first type only a specific reading is permissible; in the second type both readings are possible; and in the third type only a non-specific reading is possible. Let us elaborate this with some examples. Firstly, only specific NPs are possible in prototypical realis contexts such as declarative sentences in the perfective past or in the ongoing present such as (7):

(7) Tom married a Japanese girl [specific].

In (7) the speaker is committed to assert that there exists a particular Japanese girl in the universe of discourse. A non-specific interpretation is not possible in such contexts. Note, however, that a non-specific interpretation is permissible even in a realis context when an epistemic adverb such as apparently or maybe is present:

(8) Apparently Tom married a Japanese girl [specific/non-specific].
Chapter 3

Secondly, just like the ‘want’ sentence in (1), a referent in sentences in various irrealis contexts, such as ‘future’ and ‘potential’, can be either specific or non-specific. Let us take an example in the ‘future’:

(9) Tom will marry a person who speaks Japanese [specific/non-specific].

In the specific reading, the speaker is committed to the existence of a particular person, whom Tom may have fallen in love with already. In the non-specific reading, the speaker is not committed to the existence of such a person. The non-specific reading is possible as the event in the future has not occurred yet.

Haspelmath points out that sentences with distributives such as everybody in English would also yield ambiguous interpretations:

(10) Everybody is reading something [specific/non-specific].

(10) may be interpreted as either “everybody is reading the same thing” or “different people may be reading different things”. Haspelmath argues that when something is interpreted as referring to different entities, they qualify as non-specific.

Thirdly, there are irrealis contexts where the specific interpretation is not permissible for pragmatic reasons. Such irrealis contexts include ‘imperatives’ as in (11), ‘questions’ as in (12), ‘conditionals’ as in (13) and ‘in the scope of negation’ as in (14):

(11) Buy me some [*specific/non-specific] newspaper.
(12) Did you see anyone [*specific/non-specific]?
(13) I will tell you if anyone [*specific/non-specific] comes.
(14) I didn’t see anyone [*specific/non-specific].
Haspelmath (1997: 41-4) explains the inadmissibility of the specific interpretation of an entity in such contexts as follows. Entities expressed in an indefinite noun phrase cannot be specific in imperatives because that would violate Grice’s cooperative principle, i.e. while the speaker asks the hearer to do something, he withholds some crucial information from the hearer. An indefinite noun phrase with specific reference in questions also violates Grice’s cooperative principle. If the entity is specific (and indefinite), the speaker is withholding crucial information while requesting the hearer to supply missing information. Haspelmath notes that conditionals are thought of as imperatives in their instructional function, as in “suppose someone comes...”. Thus, it is pragmatically unacceptable for the entity to be specific. In the negative sentence, it is necessarily non-specific as that entity does not exist.

Haspelmath summarises the possible distribution of the specific and non-specific expressions in many languages over different propositional contexts as below:

<table>
<thead>
<tr>
<th>realis context</th>
<th>irrealis context</th>
</tr>
</thead>
<tbody>
<tr>
<td>perfective past, ongoing present</td>
<td>‘want’, future, distributive</td>
</tr>
<tr>
<td>specific possible</td>
<td>specific impossible</td>
</tr>
<tr>
<td>non-specific</td>
<td>non-specific possible</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>imperative</th>
<th>question, conditional</th>
<th>in the scope of negation</th>
</tr>
</thead>
</table>

Fig. 1. Propositional contexts for (non-)specific phrases (Modified from Haspelmath)

In addition to the characteristics of the whole of the proposition, Givón (1993: 217-8) notes that some verbs are non-implicative in nature and allow a non-specific reading even if they refer to a past event:
(15) She was looking for a rich man [specific/non-specific].
(16) She craved an apple [specific/non-specific].

Further, he points out that habitual and nominal predications allow a non-specific reading:

(17) Every Tuesday John meets a woman [specific/non-specific] at the pub.¹
(18) John is a teacher [non-specific].

John is a teacher I used to know [specific].

Givón points out that the irrealis, negation, habitual and nominal predication modes have a common denominator, i.e. they induce non-specificity: “None of these modes depicts the occurrence of a particular event at a particular time. This is, presumably, the irreducible core of ‘non-fact’” (Givón 1993: 218).

Pragmatic effect on the interpretation of (non-)specificity has also been noted. Givón (1993: 226) points out that sometimes even if a certain entity is known to exist, it may be interpreted as non-specific when its specificity “doesn’t matter” in the immediate context. We have pointed out that plurality decreases the possibility of an indefinite noun phrase in an irrealis context being interpreted as specific. He states that this is not only found in the irrealis context; a plural noun phrase in a realis context can induce a non-specific reading, as in Mary read books. If an event of Mary’s reading books did occur, the speaker should be committed to the existence of these “books” in the universe of discourse. Givón argues that

¹ This example may be more convincing if meets is replaced by picks up.
in this case, although "books" are not non-specific in a logical-semantic sense, they are non-specific in a *pragmatic* sense, i.e. "their specific identity doesn't matter" (226).

Givón (1993) further notes that sometimes real-world knowledge "may tip the scale towards either one interpretation or the other" (227). For example, "to sell a house" has a more specific reading than "to buy a house" in the following examples:

(19a) *She wanted to sell a house.*
(19b) *She wanted to buy a house.*

Givón (1993: 226-7) explains that in reality, a seller usually owns a house if she wants to sell it. Thus, the probability that *a house* in (19a) refers to a particular house is high. In contrast, a buyer has to consider several houses before deciding on one. Thus, the probability that *a house* in (19b) refers to a particular house is lower.

We should also consider another type of pragmatic effect regarding the interpretation of (non-)specificity. We have been presenting specificity in the light of the existence of an entity from the *speaker's* point of view. However, how do we the explain situations such as the following, in which the noun phrase denotes something specific to the *hearer* and not to the speaker?

(20) *Tell me a time convenient to you.* *It is your choice.*
(21) *A teacher you used to know* is adequate as a referee for this job.

In (20) *a time convenient to you* will be specific to the hearer and not to the speaker. In (21) *a teacher you used to know* is again specific to the hearer but not to the speaker. These examples can be explained by
Bakhtin's (1981: 279-85) view of speaker's orientation "towards the specific world of the listener". He argues that in any dialogue situation the speaker takes the hearer's reality into consideration whenever he/she makes an utterance:

"The speaker strives to get a reading on his own word, and on his own conceptual system that determines this word, within the alien conceptual system of the understanding receiver; he enters into dialogical relationships with certain aspects of this system. The speaker breaks through the alien conceptual horizon of the listener, constructs his own utterance on alien territory, against his, the listener's, apperceptive background" (Bakhtin 1981: 281).

Thus, we should take into consideration this presumed understanding by the speaker of the (non-)specificity of an entity in the hearer's world.

Closely connected to the division of specificity and non-specificity, Haspelmath's (1997: 45-8) study shows that in languages such as Russian, Lithuanian and German, different indefinite pronoun series are used to refer to an entity whose identity is known to the speaker and one whose identity is unknown to the speaker. This division divides the domain of specificity into specific/known and specific/unknown. For an entity to be specific/unknown means that while the speaker is committed to the existence of an entity, he does not known its identity.

In sum, specificity concerns the speaker's commitment to the existence of a particular entity in the universe of discourse. Formal representation of specificity in English is not binary or obligatory, unlike that of definite vs. indefinite noun phrases, but the division is often induced from the internal structure of the noun phrase as well as other linguistic and pragmatic factors.
3. Definiteness vs. indefiniteness

The division of definiteness vs. indefiniteness refers to the referential characteristics of entities in a discourse as well to their formal representation pertaining to the division of definite and indefinite noun phrases. Definite expressions in English generally refer to a noun phrase which contains a definite article such as the driver, a demonstrative such as this article, or a possessive pronoun such as your father, as well as proper nouns and most pronouns. Indefinite noun phrases on the other hand contain an indefinite article, or simply the plural form of a noun such as an apple and apples, or contain quantifiers such as a few apples and many apples without the definite article. They can also be indefinite pronouns such as something. Some quantifiers forming NP heads themselves are also regarded indefinite pronouns such as several, one, all, each and some (see Haspelmath, 1997: 11-2).

Definiteness vs. indefiniteness, when taken as referential properties, are often referred to as "given" vs. "new" or "old" vs. "new" information. Scholars have, however, suggested differing definitions of such a binary informational structure. For example, Halliday (1967), whose main interest was to examine the division from the point of view of its relationship with intonational prominence, defines the division in terms of recoverability. He argues that new information is what "the speaker presents ... as not being recoverable from the preceding discourse" (1967: 204), and given information is what "the speaker is presenting as information that is recoverable from some source or other in the environment—the situation or the preceding text" (1967: 326). Kuno (1972, 1978a) also describes the division in terms of recoverability as well as predictability: "An element in a sentence presents old, predictable information if it is recoverable from the preceding context; if it is not recoverable, it represents new, unpredictable information (1978a: 282-3).
In these views immediate discourse/text and context are presented as the major factors contributing to definiteness.

On the other hand, definiteness is viewed in a wider perspective by other scholars. For example, Chafe (1974, 1976) defines the division in terms of the notion of consciousness: “The only relevant consideration is whether or not the material is, at the time of utterance, assumed to be in the addressee’s consciousness. What we really need are terms like ‘assumed to be in addressee’s consciousness’ and its opposite” (1974: 112). Clark and Haviland (1977) define the division with respect to “shared knowledge”. They define given information as “information [the speaker] believes the listener already knows and accepts as true” and new information as “information [the speaker] believes the listener does not yet know (1977: 4). Givón (1984) defines the division in terms of whether the speakers “are entitled to assume that the hearer can—by whatever means—assign it [an entity] unique referential identity” or not (1984: 399).

There is a rough correspondence between the referential and formal representation of the division in English. Definite reference is typically expressed by definite NPs while indefinite reference is expressed by indefinite NPs. However, this is not always the case. For example, even though it is mentioned for the first time, driver is expressed in a definite noun phrase as below (example from Prince 1991):

(22) I got on a bus and the driver was drunk.

Furthermore, a definite noun phrase such as your father can be newly introduced into a discourse (example from Chafe 1976):

(23) I saw your father yesterday.
Studies have revealed that the informational structure is more complex than can be explained in terms of a binary "old" vs. "new" distinction. The definite marking of an otherwise newly mentioned entity has been explained in terms of notions such as "in the permanent registry" (Kuno 1972), "bridging" (Clark & Haviland 1977), "culturally copresent" (Clark & Marshall 1981), "inferrables" and "unused" (Prince 1981), "discourse-status vs. hearer-status informational divisions (Prince 1992), "relative or contingent deixic availability" (Givón 1984), etc.

Prince (1981) for example, introduced a type of entities "inferrables" under a ternary division of "new", "inferrable", and "evoked" information. Entities are inferrable if "the speaker assumes the hearer can infer it [an entity], via logical—or, more commonly, plausible—reasoning, from discourse entities already evoked or from other inferrables" (Prince 1981: 236). Thus, "inferrable" entities can be thought of as new information since they are introduced for the first time in a discourse while they are strongly linked with certain evoked information. Prince (1992) states that "inferrables" can be expressed either with definite or indefinite noun phrases. The definite noun phrase the driver in I got on a bus yesterday and the driver was drunk is a case where the inferrable is expressed by a definite noun phrase. On the other hand, she points out that the indefinite noun phrase a page in I picked up that book I bought and a page fell out is also an inferrable as it is one of the set of pages which is associated with the book. The difference between the definite representation of the driver and the indefinite representation a page relates to, Prince argues, whether "prior belief involves a set (of pages...) rather than a single entity (the driver). Hinds (1987) argues that the application of this taxonomy helps to explain the distribution of the topic particle wa in Japanese.
Prince (1992) later offers an explanation for the definite coding of firstly mentioned entities in terms of two independent divisions of new/old information. One is a “discourse-new” vs. “discourse-old division” which bases the “new/old” information contrast on the immediate discourse. The other is a “hearer-new” vs. “hearer-old division” which is based on the speaker’s assumption of the familiarity of the referent to the hearer. According to this cross-cutting division, we can say that your father is “hearer-old” information, which is expressed by a definite noun phrase, while it is “discourse-new” information in the sense that it is introduced into the immediate discourse for the first time. Prince referred to such a case as “unused” new information in 1981. In sum, Prince argues that the definite and indefinite coding in English reflects hearer-status (hearer-old or hearer-new) and not discourse-status (discourse-old or discourse-new) of the entity.

The phenomenon where newly introduced entities get definite coding was treated separately by Prince as “inferrables” and “hearer old/discourse new” information. However, Givón (1984) treats them together. He states that if the speaker assumes that “the hearer can assign unique identity to the referent, due either to referential accessibility from the permanent file [Prince’s “hearer old/discourse new” information] or deictic accessibility given the immediate discourse context [Prince’s “inferrables”] (1984: 402), he will code the referent as definite, while if the speaker assumes that the hearer cannot assign unique identity to the referent, he will code the referent as indefinite. The definition offered by Givón based on the single referential division and a single representational division seems easier to understand.

The internal structure of definite noun phrases has also been pointed out to be related to information status. We saw in Section 2 that the presence of restrictive modification in an indefinite noun phrase
Chapter 3

reflects a higher degree of specificity. Brown and Yule (1987) point out that different types of definite expressions are not free variants of definite reference but reflect subcategories of old information. Their findings show that the pronouns are only used to refer back to the most recently introduced entity ("current" entities), whereas a definite noun phrase with some modification such as the red circle is used to refer to entities which were mentioned not so recently ("displaced" entities). An extra modification within the noun phrase is needed to avoid evoking other possible entities which have already been mentioned.

In sum, the referential division of definiteness vs. indefiniteness concerns the speaker’s assumption of whether the hearer can assign unique identity to the referent which the speaker has in mind. In English this assumption is expressed primarily in a binary and obligatory opposition as definite vs. indefinite noun phrases. Further, the internal structure of the noun phrase reflects the varying informational characteristics of definiteness.

4. The relationship between the divisions of specificity vs. non-specificity and definiteness vs. indefiniteness.

Now we turn to examine the relationship between the two divisions. The specific vs. non-specific division concerns the speaker’s commitment to the existence of an entity within the universe of discourse. The definite vs. indefinite division concerns the speakers’ assumption about whether the hearer can uniquely identify the entity in question. Definite referents, therefore, should always be specific:

(24) Mary ate the eel [specific/definite] which Bob had bought for her.
A referent has to be specific (either to the speaker or to the hearer) for the speaker to assume that the hearer can uniquely identify it. Karttunen’s (1976: 366) observation that only a specific NP can be a “discourse referent” relates to such a relationship:

(3a) Sam bought a computer [specific/indefinite]. It is powerful.
(3b) Sam wants to buy a computer [non-specific/indefinite]. *It is powerful.

As shown in (3), both specific and non-specific referents can be indefinite, as they are introduced in the discourse for the first time. Even if the entity is specific, the speaker might not assume it to be uniquely accessible by the hearer. A non-specific referent, on the other hand, cannot be definite. If the speaker is not committed to the existence of an entity, how can he assume the hearer can identify it? Thus, non-specific referents are always indefinite. Therefore, the relationship between the definite vs. indefinite division and the specific vs. non-specific division looks like this:

<table>
<thead>
<tr>
<th></th>
<th>definite</th>
<th></th>
<th>indefinite</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>specific</td>
<td></td>
<td>non-specific</td>
</tr>
</tbody>
</table>

Fig 2. The relationship between the definite vs. indefinite division and specific vs. non-specific division.

Frawley (1992) uses terms such as specific definites, specific indefinites, and non-specific indefinites to express the overlap. The following sentences represent the three overlapping domains.

[Non-specific indefinites]
(3b) Sam wants to buy a computer. He hasn’t decided what kind of computer he is going to buy yet. He has to talk to specialists and
explain his needs and budget first.

[Specific indefinites]

(3a) Sam bought a computer. I saw it yesterday. It is quite powerful.

[Specific definites]

(25) Sam bought the computer at last. It is the one that both you and I recommended for him.

We should note here the existence of a third category of reference which interacts with non-specificity and definiteness. It is the category of "generic" reference. In English, generic reference can be coded by a definite noun phrase as in (26) or a plural indefinite noun phrase as in (27):

(26) The tiger is dangerous.

(27) Tigers are dangerous.

Such coding reflects the complex characteristics of generic reference, which is definite in terms of the speaker’s assumption of the hearer’s knowledge of such entities but non-specific because it does not refer to any specific entity. In order to explain this anomaly, Givón suggests that there are different referential universes, i.e. the “universe of tokens” in which common reference operates, and the “universe of types” in which generic reference operates:

“The most common reference—and definite description—in human language indeed pertains to members of the universe of tokens. But reference and definite description may on occasion pertain also to members of the universe
of types, within which each type behaves, referentially, like tokens do within their universe of tokens.” (Givon 1984: 406)

In sum, the divisions of specificity vs. non-specificity and definiteness vs. indefiniteness are partially independent, i.e. a specific referent may be definite or indefinite, while an indefinite referent may be specific or non-specific. How such divisions are coded may differ from language to language.

5. Implications for the analysis of the Japanese examples in this study

Above, we have clarified the two referential divisions of specificity vs. non-specificity and definiteness vs. indefiniteness and discussed how such divisions are manifested in surface representations in English. Regarding the division of specificity vs. non-specificity, we saw that while English lacks a binary coding in the noun phrase, other linguistic contexts are associated with this division. Japanese also lacks a binary representation of specificity in the noun phrase. However, we will be able to transfer the observations on other linguistic factors pertaining to this division in English to the examination of Japanese examples. I will use the terms “specific” vs. “non-specific” as these are more generally used in the literature.

Regarding the definite vs. indefinite distinction, the depth and the ways in which the relationship between the referential and formal oppositions have been examined pertaining to English do not transfer directly to the Japanese language, as Japanese does not regularly represent such a division formally. For example, Prince’s dual informational structures may be useful for explaining the rules in English, but will not be relevant in our analysis of Japanese examples. I will therefore simply use one binary referential division. In order to denote this division I will use
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the terms "definite" vs. "indefinite", rather than "given/old/evoked" vs. "new" entities.

Lexical and Syntactic Characteristics of Nouns and Quantity Expressions in English and Japanese

1. Introduction

The aim of this chapter is to briefly describe the lexical and syntactic characteristics of nouns and quantity expressions which are pertinent to the description of the lexical characteristics of English and Japanese. We will use "quantity expressions" not only to denote and structure relations between noun phrases, but also to denote quantity.

Let us first characterize a noun and its quantity expression. As we showed in Section 6 of Chapter 2, although "entities" are typically expressed by nouns in both languages, "intangibles" and "quality of entities and situations" can also be expressed by nouns. Thus, a noun and its quantity expression not only express "numeration" and "measurement" of entities (e.g. "my age" and "a little salt"), but can also express "intangibility and "degree" of "qualities" (e.g. "our taste" and "amount of quantity" (e.g. a lot of strength).

In Section 2, we shall begin our observations regarding what nouns and quantity expressions imply in both languages from a typological point of view. In Section 3, we will examine the lexical characteristics of quantity expressions in both languages. In Section 4, we will examine the syntactic positioning of quantity expressions in both languages.
Chapter 4

4

Lexical and Syntactic Characteristics of Nouns and Quantity Expressions in English and Japanese

1. Introduction

The aim of this chapter is to briefly describe the lexical and syntactic characteristics of nouns and quantity expressions which are pertinent in the description of the lexico-grammar of English and Japanese. We will use "quantity expressions" to refer to words and phrases which can occur with nouns to denote a notion of quantity.

Let us first clarify what a noun and its quantity expression can denote. They do not only represent an "entity" and its quantity. As we showed in Section 6 of Chapter 2, although "entities" are typically expressed by nouns in both languages, "situations" and "quality of entities and situations" can also be expressed by nouns. Thus, a noun and its quantity expression not only express "numeration" and "measurement" of "entities" (e.g. three pigs and a little salt), but can also express "iterativity" and "duration" of "situations" (e.g. three visits and some sleep) and "degree" of "quality" (e.g. a lot of strength).

In Section 2 we will begin our observations regarding what nouns and quantity expressions convey in both languages from a typological point of view. In Section 3 we will examine the lexical characteristics of quantity expressions in both languages. In Section 4 we will examine the syntactic positioning of quantity expressions in both languages.
2. Singular/plural opposition in English vs. collective/singulative opposition in Japanese

When we introduced the boundedness and unboundedness division as a basic semantic criteria pertinent to the notion of quantity in Chapter 2, we examined the division through English examples of count and mass nouns. This division is also relevant to the singular and plural contrast of bounded entities. Japanese does not regularly express these divisions. However, this does not mean that they cannot be conveyed in Japanese; they are just expressed differently. We need to look at the issue from a typological point of view.

Like most Indo-European languages, English possesses the singular/plural opposition and a noun denotes an individual member of a category. A plural suffix denotes the plurality of such members. On the other hand, Japanese reflects characteristics of numeral classifier languages, which include many East and South-East Asian languages. Downing (1996) states:

"Numeral classifier languages typically lack obligatory plural marking, and it has been suggested that classifiers are required in these languages."

(Downing 1996: 3)

Downing (1996: 199) provides a thorough typological background of numeral classifier languages and, although these may vary in the extent to which they use numeral classifiers, she suggests that Japanese "conforms to the outline of a numeral classifier language" in two aspects: "its nouns do appear to be 'transnumeral' [they do not mark the singular vs. plural distinction]" and "classifier phrases do appear to serve a unitizing function when coupled with these nouns". Greenberg (1972) uses the opposition "collective/singulative" to describe the system which numeral classifier languages use in contrast to the "singular/plural"
opposition of Indo-European languages. In "collective/singulative" languages a noun denotes "collectiveness" (Greenberg 1972: 26) or "concepts" (Hundius & Kölver 1983: 182). In numeral classifier languages, numeral classifiers are used as "individualizers" (Greenburg 1972: 26) of the concepts denoted by nouns and help to establish "immediate reference to individual objects" (Hundius & Kölver 1983: 182).

Thus when we talk about "numeration" or "more than one entity", we understand that while such a concept can be conveyed by a noun alone in English with the plural suffix, in Japanese it can only be explicitly expressed by a combination of a noun and a numerical expression or other kind of quantity expression which denotes plurality of bounded entities. Furthermore, when we talk about "numeration" we assume that in English it is understood as referring to more than one entity in contrast to a single entity, while in Japanese it is understood as referring to more than one individuated entity in contrast to a notion of entity which may be non-individuated. This occurs because the two languages express the boundedness and unboundedness division differently.

3. Lexical characteristics

Let us examine the lexical characteristics of quantity expressions in both languages and clarify what semantic notions are considered pertinent.

3.1 Lexical characteristics of quantity expressions in English

In English grammar, quantity expressions have been categorised on the basis of their syntactic characteristic of appearing as an element in a noun phrase preceding the head noun as well as on their semantic characteristic of denoting quantity.
a. Pre-nominal element

The positional characteristic of quantity expressions in English is well reflected in classifications such as "adjectives", "determiners" and "noun-modifiers". For instance, Jespersen (1933) treats quantity expressions such as *many* and *a few* as "quantifiers" in contrast with "qualifiers" such as *kind* and *long*, and categorises both as "adjectives". Huddleston (1984) classifies quantity expressions as "determiners" together with words such as *the* and *her*. According to his classification, the determiners in turn constitute part of "pre-head dependents" in NP structures along with "modifiers" such as *kind* and *beautiful*. Givón (1993) classifies quantifiers under "noun-modifiers".

b. Numerical and non-numerical expressions

Often a distinction is drawn between quantity expressions which denote exact number and those that do not. For example, Givón (1993) makes the distinction between "quantifiers" which are "noun-modifiers that connote quantity or extent ..." (e.g. *many* and *a few*) and "numerals" (e.g. *three*). He treats "numerals" as a subclass of "quantifiers". According to Quirk et al (1973), however, "cardinal numbers" are classified separately from "quantifiers".

c. Single words and phrasal expressions

As far as the internal structure of quantifiers is concerned, a distinction is sometimes drawn between single-word and phrasal expressions in English. Kaplan (1995) uses "quantifier words" for single-word quantity expressions (e.g. *many*, *some*) and "quantifier phrases" for phrasal expressions (e.g. *a few*, *a great deal of*). Quirk et al (1973) also classify "quantifiers" into two major classes, "closed-system quantifiers" and "phrasal quantifiers". Closed-system quantifiers are quantifiers which
can precede the noun without of, such as few, a little, several, many, etc. Phrasal quantifiers are those which occur with of such as lot, deal and number.

d. Count and mass opposition

Non-numeral quantity expressions are often organised into those which occur with count nouns and those which occur with mass nouns in English. Leech and Svartvik (1975) point out the correspondence in the quantitative values between sets of "amount words" such as a few vs. a little. Quirk et al (1973) divide closed system quantifiers (quantity expressions which are not linked to the head noun with of) further into three subclasses according to whether they co-occur with count nouns (e.g. a few, many), mass nouns (e.g. a little, much) or both (e.g. some). Phrasal quantifiers are similarly divided into three subclasses according to whether they occur with count nouns (e.g. a number of, this good number of), mass nouns (e.g. a good deal of, the large quantity of), or both (e.g. plenty of, a lot of, lots of).

Thus, quantity expressions in English are generally thought of as an element of a noun phrase which precedes the head noun. Quantity expressions are subcategorised into those which are numeral and non-numeral, those which occur with count nouns and mass nouns, and those which are single-words or phrases.

3.2 Lexical characteristics of quantity expressions in Japanese

The major characteristic of Japanese quantity expressions, which is often mentioned, is the existence of a large number of classifiers and the compulsory use of them with numbers. Backhouse (1993) states:

"Numerical words like hutari, sanmai are usually termed 'numbers', and they are composed of two elements, a numeral (huta- 'two', san- 'three')
plus a classifier (-ri-, -mai). Unlike English, where numerals are used as they stand to quantify words (two people, three sheets, etc.), Japanese numerals are not generally used as independent words." (Backhouse 1993: 119)

The semantic properties of Japanese classifiers have been studied not only in the framework of traditional Japanese grammar (cf. Okutsu 1969; Ikegami 1971; Tamamura 1982) but also in the light of cross-linguistic frameworks (cf. Denny 1979, 1986; Downing 1986, 1996).

There are also non-numerical quantity expressions in Japanese such as takusan ‘many, much’ and sukoshi, ‘a little’:

“Quantifiers are words that express quantity, either in a general way (zeNbu ‘all’, hotoNdo ‘almost all’, takusaN ‘a lot, much’) or numerically (hutari ‘two (people), saNmai ‘three (flat objects)’).” (Backhouse 1993: 118)

The contrast between numeral-classifier pairs and non-numerical expressions reflects the semantic distinction between “numeral” and “non-numeral” notions in Japanese.

However, unlike English, “phrasal” and “non-phrasal” or “count” and “mass” distinctions are usually not considered to be relevant in the description of Japanese quantity expressions.

Furthermore, again unlike English, the category of quantity expressions is not generally associated with an NP head. Both non-numerical quantity expressions and numerical expressions are “generally viewed as a subclass of nouns” in Japanese (Backhouse 1993: 122). This reflects the different syntactic position in which quantity expressions occur in Japanese compared to English, which we will investigate in the next section.
While recognising the differences in the lexical and grammatical characteristics of quantity expressions in the two languages, in this study we will use the terms “quantity expressions” or “quantifiers” as neutral semantic terms to include all quantity-related expressions, whether they are numerical or non-numerical, single-word or phrasal, numbers or a combination of a number and a classifier. The only criterion is that the semantic function includes denotation of a notion of quantity of a certain entity. The quantity expression may thus reflect additional semantic characteristics of entities such as boundedness vs. unboundedness, numerical vs. non-numerical, and partial or collective.

4. Syntactic characteristics

We will illustrate below the different syntactic positions in which a quantity expression occurs in relation to the noun it quantifies in both languages.

4.1 English

In English, although the mobile nature of all has been studied by some transformational linguists (cf. May 1990) as in *The people all arrived* in contrast with *All the people arrived*, quantity expressions generally appear in an pre-nominal position within a noun phrase:

(1) *Many pigs went to the market.*

(2) *He drinks one pint of milk a day.*

As we have pointed out in 3.1, this is why quantity expressions in English are regularly classified under a lexical group which precedes the head noun, such as “adjectives” (Jespersen 1933), “pre-head NP dependent” (Huddleston 1984) and “noun-modifier” (Givón 1993).
On the other hand, in Japanese quantity expressions appear in three different syntactic positions in relation to the noun they quantify: pre-nominally, NP-externally and appositively. We will describe these structures below.

4.2 Japanese

a. Pre-nominal placement

Sometimes a quantity expression appears pre-nominally within the noun phrase, syntactically linked to the head noun with the genitive particle no. This pre-nominal placement corresponds to the determiner-like position of quantity expressions in English. Look at the following example:

(3) Sofii-wa  ni-tsuu-no  tegami-o  motte
S.-TOP   two-CL-GEN letter-ACC    holding
niwa-o   tsukkiri,               yotsunbai-ni   natte
yard-ACC running-through   all fours-DAT becoming
ikegaki-o  kugutta. (ss)
hedge-ACC    went under

'Holding the two letters, Sophie ran through the garden, crouched down on all fours, and wormed her way through the hedge.'

The syntax of the pre-nominal placement of quantity expressions is reminiscent of the syntax of nouns in Japanese. Generally, when a noun is used to modify another noun in Japanese, it appears pre-nominally, linked to the noun with the genitive particle no:
(4) midori-no kuruma
    green-GEN car
    ‘green car’

or

(5) uuru-no seetaa
    wool-GEN sweater
    ‘woollen sweater’

However, there are clearly two semantic relations expressed by this prenominal structure. Compare the following:

(6) nisen-shiishii-no kuruma
    two thousand-cc-GEN car
    ‘2 litre car’

(7) ni-dai-no kuruma
    two-machine-GEN car
    ‘two cars’

Although identical in their syntactic representation, nisen-shiishii no ‘2 litre’ in (6) adds information about the car by means of the characteristics of its engine whose capacity is described in terms of a quantity notion, while ni-dai no ‘two machines’ in (7) expresses the number of cars. The former is not a case of quantification, and we are only concerned here with the latter case.

b. NP-external placement

Quantity expressions in Japanese can appear outside a noun phrase:
In (8), the noun gohan ‘rice’ is followed by an accusative case particle お which forms a postpositional phrase, and the numerical quantifier さん-bai ‘three bowls’ occurs outside the postpositional phrase. In (9), the noun うち ‘house’ is followed by a nominative case particle が and the non-numerical expression たくさん ‘many’ again occurs outside this noun phrase. As quantity expressions often appear before the verb as in (8) and (9), they have often been considered as adverbs. Alfonso (1974), for example, treats them as adverbs:

“... those words which have the idea of QUANTITY, generally do not go with the Noun in Japanese, BUT WITH THE VERB. So, what is often an Adjective in English is an Adverb in Japanese.” (Alfonso 1974: 91)

Quantity expressions, however, can appear before the postpositional phrase or even further away from it:

(10) Issho-ni なotta fune-no お-kyaku で
together boarded boat-GEN HON-passenger COP
oozei hotoke-ni natta hito-ga iru. (B)
many dead man-DAT became person-NOM exist
‘Among the passengers who boarded the boat at the same time, there were many who (later) died.'
(10) Oozei issho-ni notta fune-no o-kyaku de many together boarded boat-GEN HON-passenger COP hotoke-ni natta hito-ga iru. dead man-DAT became person-NOM exist

The term “NP-external” is used in this study simply to describe the syntactic relation of the quantity expression to a noun phrase. We should note that sometimes an NP-externally placed quantity expression appears by itself when the noun phrase it quantifies is elided:

(11) Tsugi-wa Shizuoka-ni tuite, kondo-wa next-TOP S.-DAT arriving, this time-TOP [kyaku-ga] oozei notte-kuru zo. (H) [passenger-NOM] many boarding-come SP ‘We will stop at Shizuoka next and this time many [passengers] will get on [the train]’

c. Appositive structure

There is another structure in which a quantity expression occurs within a noun phrase in Japanese:

(12) Shingo-wa Fusako to kodomo futa-ri-ga nemutte-iru S.-TOP F. and child two-CL-NOM sleeping-is yoko-o tootte, chanoma-ni hairu to, ... (Y) side-ACC passing living room-LOC enter and ‘Walking past Fusako and the child, both whom were asleep, Shingo went into the living room and ...’
In this structure, the quantity expression *futa-ri* ‘two people’ occurs within the noun phrase, immediately following the head noun *Fusako to kodomo* ‘Fusako and the child’.

The examination above shows that quantity expressions in Japanese can appear in three different positions in relation to the nouns they quantify, while in English they appear pre-nominally.

### 4.3 Quantity expressions as head nouns

We cannot conjure up a notion of quantity without association with the quantifiable it quantifies. However, in addition to co-occurring with the nouns they quantify, quantity expressions can also occur as head nouns themselves in both languages. In (13) and (14), although there is no mention of a quantifiable, the context would give an understanding of which substance is being talked about:

(13) **300 grams** won’t be enough.

(14) *Sanbyaku-guramu de-wa tari-nai.*

300-grams COP-TOP suffice-NEG

Quantity expressions acting as head nouns in a noun phrase may express partial quantity in both languages:

(15) *Two of the students are Japanese.*

(16) *Seito-no *futa-ri-wa nihonjin desu.*

student-GEN two-CL-TOP Japanese COP

Finally, a quantity expression often functions anaphorically in Japanese where English would use a pronoun:
Do you know if this path is the one they took? (FPF)

(18) **Futa-ri-wa sono komichi-o tootta no.** (sk)

two-CL-TOP that lane-ACC passed NMLZ

‘Lit.: Did the two walk along this lane?’

We will examine in detail the anaphoric use of quantity expressions in Chapter 9.

5. **Summary**

We have illustrated some formal discrepancies between English and Japanese in the ways they express quantification. From a typological point of view, we have pointed out that nouns denote immediate reference in English, while they denote “collectiveness” or “mere concepts” in Japanese. We have also pointed out that the two languages differ in the way they express the boundedness and unboundedness division. In English, such a division is reflected in the count and mass distinction in nouns and in some quantifiers, and further in the singular and plural distinction of bounded entities. In Japanese, this division is expressed as an individuated or collective reading of the referent. This issue will be investigated in depth in terms of how Japanese expresses the bounded and unbounded notions through the use of quantifiers in Chapter 8, and how quantity expressions are used, instead of the English plural suffix, as a lexical device to indicate individuated entities in Chapter 9.

From a lexical point of view, we have shown that apart from the fact that both languages express a distinction between numeral and non-numeral notions, the two languages show varying lexical characteristics. Firstly, we have shown that quantity expressions in English are categorised along with words which occur before a head noun within a
noun phrase. In Japanese, quantity expressions are basically categorised as a subclass of noun and are not seen as syntactically closely connected with the nouns whose quantity they denote. On the contrary, they have often been categorised as adverbs in Japanese. Further, English has distinctions between a count and mass set of quantity expressions and single-word or phrasal quantity expressions, while such distinctions are not generally found in Japanese. Japanese, however, is characterised by the existence of an abundance of numeral classifiers.

From a syntactic point of view, we have shown that although the syntactic position of a quantity expression is pre-nominal in English, it appears in three different positions in Japanese, which presents a case of skewing. We will investigate this phenomenon further in the next chapter.
5

Syntactic Positions of Japanese Quantity Expressions and the Domains of Indefiniteness and Specificity

1. Introduction

As shown in Chapter 4, quantity expressions in Japanese appear in three syntactic positions in relation to the noun they quantify: they may occur pre-nominally, linked to the head noun with the genitive particle no as in (1); they may occur outside the noun phrases as in (2); or they may appear within a noun phrase after the head noun followed by a case particle as in (3). In this study we call these “pre-nominal construction”, “NP-external construction”, and “appositive construction” respectively. The examples are repeated below:

(Pre-nominal construction)

(1) Sofii-wa ni-tsuu-no tegami-o motte
S.-TOP two-CL-GEN letter-ACC holding
niwa-o tsukkiri, yotsunbai-ni natte
yard-ACC running-through all fours-DAT becoming
ikegaki-o kugutta. (ss)
hedge-ACC went under
‘Holding the two letters, Sophie ran through the yard and went through the hedge on all fours.’
Chapter 5

(NP-external construction)

(2) **Gohan**-**o san-bai mo tabete,**... (I)
    
    rice-ACC three-CL as many as eating
    
    ‘I have even eaten three bowls of rice, and ...’

(Appositive construction)

(3) **Shingo-wa Fusako to kodomo futa-ri-ga nemutte-iru**
    
    S.-TOP F. and child two-CL-NOM sleeping-is
    
    yoko-o tootte, chanoma-ni hairu to, ... (Y)
    
    side-ACC passing living room-LOC enter and
    
    ‘Walking past Fusako and the child, both of whom
    
    were asleep, Shingo went into the living room and ...’

Generally, textbooks in Japanese explain that a quantity expression occurs after the noun and a particle. As mentioned in the previous chapter, Alfonso (1974: 91) emphasises the adverbial characteristics of Japanese quantity expressions pointing out that quantity expressions often appear before a verb. However, learners whose L1 is English often place quantity expressions pre-nominally. The tendency to place the quantity expression before the noun obviously reflects the pre-nominal characteristic of quantity expressions in English. Pre-nominal placement of a quantity expression is not always ungrammatical and the difference between this and the NP-external construction can be subtle in certain contexts. In many instances though, a pre-nominal construction simply sounds unnatural to a native speaker.

This chapter investigates the different syntactic placements of quantity expressions in Japanese in the light of the divisions of definiteness vs. indefiniteness and specificity vs. non-specificity. This is of interest from a skewing point of view, as such divisions are typically
associated with, and expressed by, the noun phrase in English. We will argue that the pre-nominal construction syntactically reflects the domain of specificity while the NP-external construction reflects the domain of indefiniteness. We will further point out that a non-specific reading of quantified referents can only be expressed by the NP-external construction and will apply this hypothesis to examine the restrictions on the occurrence of NP-external constructions with noun phrases other than in nominative and accusative cases.

In Section 2 we examine different views regarding whether the NP-external and pre-nominal constructions differ in meaning, and argue for the view that the two constructions do reflect different meanings. We will propose the idea of investigating their meaning differences in the light of the specificity vs. non-specificity and definiteness vs. indefiniteness divisions. In Section 3 we ascertain the plausibility of our hypothesis by examining attested examples. In Section 4, we will briefly point out the semantic characteristics of the appositive construction. In Section 5 we will see if the proposed meaning of the NP-external construction can shed light on its restricted occurrence.

2. Semantic distinction between NP-external and pre-nominal constructions

In this section we examine different views regarding the similarities and differences between the pre-nominal and the NP-external constructions, and propose the idea of investigating their semantic differences further in the light of the divisions definiteness vs. indefiniteness and specificity vs. non-specificity.

Transformational linguists like Okutsu (1969, 1974), Shibatani (1977, 1978), Kamino (1977) and Haig (1980) treat the pre-nominal construction and NP-external construction as synonymous. They hold
the view that the NP-external construction is derived from the pre-nominal construction through a transformational rule called "Quantifier Float", which allows a quantity expression to float out of the noun phrase. Thus, a pair of sentences such as those below are treated as synonymous:

(4a) *Mukashi aru tokoro-ni san-biki-no kobuta-ga sunde-ita.*

long ago certain place-LOC three-CL-GEN piglet-NOM living-was

'Once upon a time there lived three piglets.'

(4b) *Mukashi aru tokoro-ni kobuta-ga san-biki sunde-ita.*

long ago certain place-LOC piglet-NOM three-CL living-was

Shibatani (1978) explains why he treats the pre-nominal construction as a deep structure as follows:

"Suuryooshi wa ... aru meishi-ku o genteishuushoku shite iru. Kono shuushoku kinoo o sonomama haneishite iru koobun ... ga kihon-koozoo de aru to kangaerareru..." (Shibatani 1978: 243)

'Quantifiers restrictively modify a noun phrase. The structure which accurately reflects this modifying function should be considered the base structure.'

However, differences between the two constructions have also been pointed out. One is a stylistic difference. Downing (1996) shows that, although in written texts both constructions are used in the
introductory mention of quantified referents, the pre-nominal construction for such a purpose is dispreferred in oral speech: “While Q-Float introduction [the NP-external construction] is used regularly in both text modes, the Pre-Nominal introduction is clearly dispreferred in oral text” (1996: 249). She attributes this tendency—that the pre-nominal construction is dispreferred in speech—to the “processing advantage for the hearer” (1996: 249). This means that it is easier for the hearer to process the information if the noun phrase does not include information about the quantity of the referent, especially in cases where it contains other pre-nominal modification. Downing’s quantitative observation seems to explain the introspective observations made earlier by Nishio (1977: 132) and Okutsu (1986: 71) that the NP-external construction is more natural in some examples.

Apart from such stylistic differences, scholars such as Inoue (1978), Takano (1984, 1986), Okutsu (1986) and Downing (1996) point out semantic differences between the two constructions. Their observations concern the semantic-pragmatic characteristic of the quantified referent and its relation to the group of entities of which it is a part or whole. For example, Inoue argues that when the noun phrase is indefinite the quantity expression can occur external to the noun phrase without changing the meaning, as shown in the pair below:

(5a) Suu-nin-no shoonen-tachi-ga watashi-ni
several-CL-GEN boy-PL-NOM me-DAT
ai-ni kita.
see-in order to came
'Several students came to see me.'
(Inoue 1978)
(5b) *Shoonen-tachi-ga suu-nin watashi-ni*  
boy-PL-NOM several-CL me-DAT  
*a-i-ni kita.*  
see-in order to came  
‘Several students came to see me.’

(Inoue 1978)

However, she argues that when a quantity expression of a *definite* noun phrase is moved outside the noun phrase, it will change the meaning:

(6a) *Watashi-wa kinoo atta suu-nin-no gakusei-o shootaishita.*  
I-TOP yesterday met several-CL-GEN students-ACC invited  
‘I invited the several students I met yesterday.’

(6b) *Watashi-wa kinoo atta gakusei-o suu-nin*  
I-TOP yesterday met students-ACC several-CL invited.  
‘I invited several of the students I met yesterday.’

(Inoue 1978)

Inoue explains that *kinoo atta gakusei* ‘students whom I met yesterday’ in (6) is a *definite* noun phrase which incorporates a relative clause. She points out that in the pre-nominal construction in (6a) the “several students whom I invited” are “the several students whom I met yesterday”. In contrast, she argues that NP-externally placed *suu-nin* in (6b) refers to several of the students I met yesterday. Her argument that a pair such as (6a) and (6b) have different deep structures is convincing.
However, her claim that *kinoo atta gakusei* ‘students whom I met yesterday’ in the above is a definite noun is questionable, as it can be specific but not necessarily specific definite. This observation therefore needs further refinement.

Along similar lines, Okutsu (1986) argues that both constructions are roughly synonymous with indefinite noun phrases. However, he argues that when *sono*, roughly equivalent to the English demonstrative *that/those* and the definite article *the*, is present in the pre-nominal construction, the quantity expression cannot be moved out of the noun phrase without changing the meaning:

(7a) *Sono san-biki-no unagi-o kudasai.*

that three-CL-GEN eel-ACC please-give

‘Could I have *those three* eels?’

(Okutsu 1986)

(7b) *Sono unagi-o san-biki kudasai.*

that eel-ACC three-CL please-give

‘Could I have *three* of those eels?’

(Okutsu 1986)

Okutsu observes that in (7a), where the quantity expression appears pre-nominally, *sono* determines exactly which ‘three eels’ the speaker is talking about. On the other hand, in (7b), where the quantity expression *san-biki* appears outside the noun phrase, *sono* ‘that/those’ only determines the class of ‘eels’ denoted by the noun phrase and does not determine which three members of those eels the speaker is talking about. He notes that the division of definiteness and indefiniteness, which is not regularly expressed in Japanese, is reflected in the different positioning of quantity expressions.
Okutsu's observation is in accordance with Inoue's view that quantified referents in the pre-nominal construction refer to the whole of the class, while quantified referents expressed by the NP-external construction can denote members of the class. Downing (1996) also notes that the quantity expression and noun in the pre-nominal construction "jointly define and exhaust the grouping at issue", while in the NP-external construction "the nominal appears first, establishing a grouping while the numeral-classifier pair subsequently delimits, making it clear that the predication applies only to some subset of the original whole" (1996: 222).

Inoue and Okutsu's observations also agree on the point that the quantified referents expressed by the NP-external construction are indefinite, while the quantified referents in the pre-nominal construction can be indefinite or definite. Regarding the definite and indefinite characteristics of both constructions, Downing adds further observations. She states that the pre-nominal construction is used when the referents are alternatively described as either specific or definite: "the standard characterisation of the Pre-Nominal construction as specific does hold in the overwhelming majority of cases" (1996: 221). She observes that the pre-nominal construction is dispreferred in sentences where the referents can be any member(s) of a category: "they are dispreferred ... where their individual identities are in fact not even known to the speaker" (1996: 221). However, she fails to apply such divisions as specificity and definiteness to explain the semantics of the NP-external construction in comparison with that of the pre-nominal construction. Instead, she is interested in looking at the pragmatic function of the NP-external construction from the point of view of how it typically carries new information and how it is predominantly used in the introductory mention of referents. She then compares the pragmatic distribution of
the NP-external construction to that of the pre-nominal construction and points out that the pre-nominal construction is used in both introductory and repeated mentions in written text: "There are certain contexts, such as introductions of individuated referents, in which either the pre-nominal or the Q-Float [NP-external] construction may be used" (Downing, 1996: 234). Furthermore, she points out that when both constructions are used in introductory mentions their meaning is synonymous: "their senses may sometimes be indistinguishable, ... may be glossed identically" (1996: 234).

The pragmatically-oriented observation of Downing's—that both constructions can be used in the introductory mention of referent without changing the meaning—corresponds to Inoue and Okutsu’s observation that quantity expressions can float from an indefinite noun phrase without changing the meaning. Downing’s observation that only the pre-nominal construction is used in the repeated mention corresponds to Inoue and Okutsu’s observation that the pre-nominal construction expresses definite reference. Therefore, it appears as if the semantic differences between the two constructions can be explained by this division.

However, this division alone is not sufficient to explain their differences. First of all, it is not the case that all indefinite referents can be expressed by both constructions without changing the meaning:

(8a) ??Ip-pai-no tsumetai biiru-ga nomi-tai.
   one-CL-GEN cold beer-NOM drink-DES
   'I would like to drink a (certain) glass of cold beer.'

(8b) Tsumetai biiru-ga ip-pai nomi-tai.
cold beer-NOM one-CL drink-DES
   'I would like to drink a glass of cold beer.'
"A glass of beer" is indefinite as it is introduced in the discourse for the first time. However, although the NP-external construction is grammatical, the pre-nominal construction sounds more unnatural. It appears that the non-specific nature of the referent in (8) is blocking the use of the pre-nominal construction. This accords with Downing’s observation that the pre-nominal construction is dispreferred when the referents can be any member(s) of a category. We need a rule which precludes the use of the pre-nominal construction when the quantified referents are not specific.

We also need to refine Inoue’s observation of the semantics of the pre-nominal construction. She regards the noun phrase in (6) as definite because it contains a relative clause and claims that quantity expressions cannot float from a noun phrase when it is definite without changing the meaning. However, as we examined in Chapter 3, although restrictive modification increases the degree of specificity, it does not necessarily make the noun phrase definite. Thus, the noun phrase in (6) in fact can be specific but it can also be indefinite, i.e. specific/indefinite.

Furthermore, Downing’s observations of the semantics of the pre-nominal construction need re-analysis. On the one hand, she notes that the pre-nominal construction denotes specific reference. On the other hand, she points out that this construction can also be used in an introductory mention, which is indefinite. Further she notes that the pre-nominal construction is dispreferred when the referents can be any member of the category, i.e. non-specific.

Thus, we propose to examine the semantic-pragmatic differences and similarities between the two constructions in the light of the two divisions, i.e. the divisions of specificity vs. non-specificity and definiteness vs. indefiniteness. As these notions are generally thought of
in terms of reference to entities, and since we are dealing with nouns and their associated quantity expressions, it is appropriate to use such notions as basic criteria to compare the formal discrepancies involved in the expression of quantity. When we compare the meaning of the two constructions below, we will be concerned with the semantic-pragmatic characteristics of the *quantified entities* and not necessarily the class of entities. We will assume that in the pre-nominal construction the semantic-pragmatic characteristics of the *quantified entities* are always in accord with that of the class of entities. In the NP-external construction these characteristics do not necessarily coincide with those of the class of entities.

3. Semantics of the pre-nominal and NP-external constructions through examination of attested examples

In this section, using attested examples, we provide a detailed comparison of the meaning of the quantified referents in these two constructions, primarily in the light of the divisions of specificity vs. non-specificity and definiteness vs. indefiniteness, which overlap with each other. We will do this in three steps. In Section 3.1, we show that quantified definite referents are expressed by the pre-nominal construction. In Section 3.2, we show that quantified indefinite referents are expressed by the NP-external construction. Then, in Section 3.3, by looking at examples in which referents are introduced for the first time in a story, we refine our initial observation of the semantics of the pre-nominal construction by showing that it in fact operates within the domain of specificity—which includes specific definite as well as specific indefinite—rather than definiteness.
3.1 Definite quantified referents and the pre-nominal construction

Japanese does not regularly express definite reference like English does with the definite article. The lack of obligatory representation, however, does not mean that Japanese has no way to express definiteness. Martin (1975) points out: "though 'the' usually goes untranslated, you can readily translate it as *sono* 'that', or you can thematize the noun to show that it has already entered the discourse in earlier context" (1975: 143-4). Kuno (1972) discusses the relationship between the topic particle *wa* and nominative case particle *ga* which reflects the given and new distinction. He (1979) also points out that old information is presented earlier in a sentence in a language with some freedom of word order like Japanese ("from-old-to-new principle").

The syntax of the pre-nominal construction is also associated with this semantic domain, as we discussed in Section 2. Although Okutsu (1986) examines the difference between this and the NP-external construction from the point of view of the scope of the demonstrative *sono* (that/these), even without *sono* some pre-nominal constructions are understood to have definite reference in Japanese. To illustrate this point, let us cite some examples from the Japanese and English translations of Sophie's World. At the beginning of the story reference is made repeatedly to two particular letters: the main character Sophie receives two mysterious letters from an unknown sender, and the story develops around these two letters. (In the following, attested Japanese and English examples are linked for comparison, with the sources indicated in brackets. Where necessary, a closer English translation of the Japanese has been added in single quotation marks):

(9a) Ittai kono ni-tsuu-no tegami-wa doko kara

EMP this two-CL-GEN letter-TOP where from
kita no daroo. (ss)
came NMLZ I wonder
‘Lit.: I wonder where on earth these two letters come from.’

(9b) And anyway where did those letters come from? (sw)

In (9a) the demonstrative kono is used before ni-tsuu no tegami and thus the definiteness of the reference is explicitly marked. Example (10a) below is the first instance where the two letters in question are mentioned as a plural entity. Before this, the two letters (which came at different times) were referred to separately.

(10a) Ni-tsuu-no nazo-no tegami-no tame-ni Sofii-wa
two-CL-GEN mystery-GEN letter-GEN sake-for S.-TOP
atama-ga kurakura-shite-kita.
head-NOM dizzy-doing-came. (ss)
opened
‘Lit. Sophie’s head started to get dizzy because of the two mysterious letters’

(10b) The mysterious letters had made Sophie’s head spin. (sw)

Although ni-tsuu no nazo-no tegami does not have a demonstrative, which appears in the corresponding English translation in (10b) as a definite article, the writer assumes that readers would know which two letters he is referring to. The above observation suggests that it is not solely the presence of sono or kono which indicates the definiteness of the referent in Japanese.
There are four more instances where the two letters are mentioned in the first chapter of Sophie's World. Pre-nominal constructions are used consistently in the Japanese version, without demonstratives:

(11a) Sofii-wa ni-tsuu-no tegami-o motte
S.-TOP two-CL GEN letter-ACC holding
niwa-o tsukkiri, yotsunbai-ni natte
yard-ACC running-through all fours-DAT becoming
ikegaki-o kugutta. (ss)
hedge-ACC went under
‘Lit.: Holding the two letters, Sophie ran through the yard and went through the hedge on all fours.’

(11b) Clutching the two envelopes in her hand, Sophie ran through the garden, crouched down on all fours, wormed through the hedge. (sw)

(12a) Daiichi-no nazo-wa ni-tsuu-no shiroi fuutoo-o
first-GEN mystery-TOP two-CL-GEN white envelope-ACC
Sofii-no uchi-no yuubin-bako-ni ireta
S.-GEN house-GEN post-box-LOC placed
no-wa dare ka. (ss)
NMLZ-TOP who Q
‘Lit.: The first mystery is who was it that had put the two white envelopes in the mailbox of Sophie’s house.’

(12b) The first problem was who had put the two white envelopes in her mailbox. (sw)

(13a) Demo kono cha-buuttoo-wa ni-tsuu-no shiroi
but this brown-envelope-TOP two-CL-GEN white
fuutoo to onaji yoo-ni, yuubinkyoku-o envelope with same like post-office-ACC toosazu jika-ni yuubin-bako-ni go-through-NEG directly post-box-LOC irer-arete-ita. (ss) place-PASS-was
‘Lit.: But this brown envelope had been placed in the mailbox directly [by the sender] without going through the post office, just like the two white letters.’

(13b) The brown envelope had been delivered by hand to the mailbox exactly like the two white ones. (sw)

(14a) Ookina kukkii-no kan kara ishi-o yuka-ni big cookie-GEN tin from stone-ACC floor-LOC buchimakeru to, ni-tsuu-no ookina fuutoo-o ireta. (ss) scatter and, two-CL-GEN big envelope-ACC placed
‘Lit.: After throwing the stones onto the floor from the big cookie tin, she put the two large envelopes into it.’

(14b) She emptied the stones onto the floor and put both large envelopes into the tin. (sw)

The observations so far support the speculation that the definite reading of the quantified referents is related to the syntax of the pre-nominal construction.

3.2 Indefinite referents and the NP-external construction

Next we will examine instances where indefinite reference is expressed by the NP-external construction. In Sophie’s World, as the two mysterious letters play an important part in the early development of the story, there
are often scenes relating to checking the mailbox for mail. Other mail apart from the two letters is also received. Interestingly, in all of the examples in which this other mail is quantified, the NP-external construction is used. Let us start with the following example:

(15a) *Fudan nara dairekuto-meer-ga dossari, sorekara usual if direct-mail-NOM a lot and ha-ha-ate-no ookina fuutoo-ga nan-tsuu-ka Mother-addressed-GEN big envelope-NOM several-CL haitte-iru.* (ss)

entering-is

‘Lit.: Usually there was a lot of junk mail and a few large envelopes addressed to her mother [in the mailbox].’

(15b) *There was usually a lot of junk mail, and a few big envelopes for her mother, ...* (sw)

A lot of junk mail and a few big envelopes refer to any mail which the speaker assumes the reader does not know about. They are mentioned here for the first time. They are indefinite referents.

Other examples found in Sophie’s World are consistent with the observation that the NP-external construction refers to indefinite entities:

(16a) *Kyoo midori-iro-no yuubin-bako-ni-wa today green-colour-GEN post-box-LOC-TOP chiisana tegami-ga it-tsuu dake [haitte-ita], (ss) small letter-NOM one-CL only entering-was

‘Lit.: Today, there was only one small [letter] in the green mailbox.’

(16b) *There was only one letter in the mailbox.* (sw)
(17a) Ehagaki-mo it-tsuu mazatte-ita. (ss)

picture post card-also one-CL mixing-was

‘Lit.: One picture postcard was in amongst (the mail) too.’

(17b) There was also a postcard .... (sw)

(18a) Hirude-ate-no tanjoobi-kaado-ga it-tsuu kita ga, ...

H.-addressed-GEN birthday card-NOM one-CL came but

Sofii-ni-wa [tegami-wa] it-tsuu mo ko-nakat-ta. (ss)

S.-DAT-TOP [letter-TOP] one-CL even come-NEG-PAST

‘Lit.: One birthday card addressed to Hilde came, but not one
[letter] came to Sophie.’

(18b) She got another birthday card for Hilde..., but she did not

receive a single birthday card herself. (sw)

In the above examples, the number of letters and cards is expressed in
English as one and a, while in Japanese the indefinite singular is
expressed with it-tsuu and ichi-mai ‘one letter’ in the NP-external
construction. These items of mail above are indefinite referents
compared to the earlier examples of the two letters which are expressed
with the pre-nominal construction.

The NP-external construction cannot express the definiteness of
the quantified referent. Let us take the pre-nominal example (11a) and
construct a corresponding sentence using the NP-external construction
(11a’):

(11a) Sofii wa ni-tsuu-no tegami-o motte

S.-TOP two-CL-GEN letter-ACC holding
As shown in the English translation above, when the quantity expression appears in the NP-external position, the definite reading of the quantified referent is lost.

Another piece of evidence which supports the indefinite reading of the NP-external construction comes from Downing’s observation that this construction very frequently occurs with the existential predicates in Japanese. Downing’s data shows that 30% of all the occurrences of NP-external constructions occur with the existential predicates *iru* and *aru*. In oral introductions with the NP-external construction, she says 40% involve the existential predicate. Studies have shown that there is a correlation between certain syntactic constructions and definite or indefinite noun phrases. Such a tendency is called the Definiteness Effect.
(Reuland & ter Meulen 1987), and existential structures such as “there is ...
" in English are typically understood to express indefiniteness:

“In many languages, for instance, there is a strong correlation between the
presence of an expletive subject and some indefinite argument elsewhere in
the clause. Other languages bar indefinites as syntactic subjects or as
topics. Even if these phenomena are not genuinely universal, they
constitute recurrent patterns in otherwise widely divergent languages.”
(Reuland and ter Meulen 1987: 1-2)

Thus, the fact that the NP-external construction occurs frequently with
existential predicates in Japanese supports our speculation that the
indefiniteness of the quantified referent is expressed by this construction.

The examination so far supports the hypothesis that definiteness of
the quantified referents is strongly correlated with the pre-nominal
construction, and indefiniteness of quantified referents with the NP-
external construction.

3.3 Specific indefinite referents

We have so far related the two constructions to the semantic opposition
of indefiniteness vs. definiteness. We will now show that the pre-
nominal construction is also used to refer to specific/indefinite referents.

As was mentioned in Section 2, while recognising the semantic
differences between the two constructions, Inoue (1978), Okutsu (1986)
and Downing (1996) all agree that there are instances where the two
constructions are synonymous. According to Inoue and Okutsu, it is
when the noun phrase is indefinite. According to Downing it is where a
referent is mentioned for the first time.

Let us re-cite the pair of examples which illustrate this:
Although there is a stylistic difference between the two, scholars unanimously agree that these examples are roughly synonymous.

In Section 3.1 we showed how definite reference is expressed by a pre-nominal construction. However, the pre-nominal construction in (4a) expresses indefiniteness, since “three pigs” are introduced for the first time. Let us look at some more attested examples in which the pre-nominal construction is used to introduce referents for the first time in a story. Note that in the English translated text indefinite noun phrases are used:

(19a) Futa-ri-no wakai shinshi-ga sukkari
     two-CL-GEN young gentlemen-NOM completely

(19b) Two young gentlemen dressed like British military men, (mk)

(20a) Sono man-naka-ni wa ip-pon-no kireina
     that EMP-middle-LOC-TOP one-CL-GEN beautiful
kabanoki-ga arimashita. (MK)
birch tree-NOM existed

(20b)... and right in the middle of it stood a single beautiful
female birch tree. (mk)

(21a) Kono ki-ni futa-ri-no tomodachi-ga
this tree-DAT two-CL-GEN friend-NOM
arimashita. (MK)
existed

(21b) The tree had two friends. (mk)

This goes against our earlier observation that there is a correlation between the domain of definiteness and the pre-nominal construction. "Three pigs" in (4) are indeed indefinite referents as they are introduced into the story for the first time and the story-teller does not assume that the reader knows which three pigs are being referred to. However, in this situation, the story-teller is committed to the existence of pigs he/she is going to talk about, although he/she does not assume that the readers know these pigs yet. Only the story-teller possesses the information which is about to be disclosed. In this sense the "three pigs" are specific indefinite. This is the domain in which the usage of the NP-external construction and that of the pre-nominal construction overlap. While the NP-external construction expresses indefiniteness regardless of whether the referent is specific or non-specific, the pre-nominal construction expresses a specific referent regardless of whether it is definite or indefinite.

The overlap of the two divisions and the use of the NP-external and pre-nominal constructions may be illustrated as follows:
Pre-nominal construction is permissible | (Pre-nominal construction is not permissible)  
---|---
specific | non-specific  
definite | indefinite  
(NP-external construction is not permissible) | NP-external construction is permissible

Fig 1. The overlapping semantic domain which both pre-nominal and NP-external constructions can express.

It is in the domain of specific indefiniteness (illustrated with xxxxxx), which both constructions can express, that scholars consider that there is no semantic difference between the two constructions. Specific indefinite referents can be expressed, at least in written text, by either of the two constructions.

Downing points out that the pre-nominal construction generally expresses specificity, and also observes that when the construction is used in introductory mention it introduces referents as “not yet identifiable for the reader/listener” (1996: 221). However, she fails to link such an observation to the overlapping domain of the two divisions of definiteness vs. indefiniteness and specificity vs. non-specificity.

For us to propose that the pre-nominal construction expresses the domain of specificity, however, we need to ascertain whether the pre-nominal construction in fact expresses both specific/known and specific/unknown domains. As we briefly noted in Section 2 of Chapter 3, the domain of specificity can be further subdivided into the known vs. unknown division. The speaker may be committed to the existence of an entity and may know its identity (specific/known) or the speaker may be
committed to the existence of an entity but may not know its identity (specific/unknown). In examples such as (19a), (20a) and (21a), where the pre-nominal construction is used to introduce a referent for the first time in a story, the referent is known to the story teller. Thus, as far as these instances are concerned the pre-nominal construction is expressing the specific/known domain. However, when the pre-nominal construction contains a non-numerical expression such as *takusan* 'many' or *ikutsuka* 'a few', it is quite possible that, while the speaker is committed to the existence of these entities, s/he does not know the identity. For the moment, therefore, we tentatively conclude that the pre-nominal construction operates in the specific domain and not necessarily only in the specific/known domain\(^1\).

Using attested examples we have shown the difference in meaning between the pre-nominal construction and the NP-external construction in Section 3. We have argued that the pre-nominal construction expresses specificity of the quantified referents regardless of whether the referent is definite or indefinite, while the NP-external construction expresses indefiniteness of the quantified referents regardless of whether the referent is specific or non-specific. The use of both constructions becomes semantically interchangeable, though there may be a stylistic difference, when specific indefinite referents occur, as both of the constructions can express this semantic domain.

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1 The semantics of this construction can be further investigated by assessing the permissibility of its co-occurrence with the indefinite noun *ka*-series in Japanese, which expresses the speaker's lack of knowledge of the identity of the referent. This issue will be discussed in conjunction with an extensive examination of the semantic and syntactic characteristics of the Japanese *ka*-series indefinite nouns in a forthcoming paper by the present writer.
4. Appositive constructions

The appositive construction is generally used as an anaphoric device. Downing notes that this structure only occurs in repeat mentions of referents where the noun and the quantity expressions independently denote the referent:

"The speaker's focus is primarily on picking out the referent(s) in question (a process which may be aided by expressing information about number which is already known) rather than on conveying any new information about the number of these referents." (Downing 1996: 228)

Example (3) represents such a semantic relationship between the noun and the quantity expression in the appositive construction. This is repeated here:

(3) *Shingo-wa Fusako to kodomo futa-ri-ga nemutte-iru*

*Shingo-wa* Fusako to *kodomo* futa-ri-ga nemutte-iru

S.-TOP F. and child two-CL-NOM sleeping-is

*yoko-o tootte, chanoma-ni hairu to, ... (Y)*

side-ACC passing living room-LOC enter and

'Walking past Fusako and the child, both of whom were asleep, Shingo went into the living room and ...'

In this example, the noun *Fusako (Shingo's wife)* and *kodomo 'child'* (which, from the context, is known to the reader to be just one child) tell the reader that the total number of the referents is two, independently of the information of the quantity expression *futari 'two'*. Downing (229) notes that the "noun slot can be filled by any referential nominals", including pronouns such as *anata-gata futa-ri 'you-PL(HON) two-CL/the two of you'* and *Taroo-tachi go-nin 'T.-PL five-CL/the five of them including Taro'*. This use of the appositive construction may correspond
to English expressions such as *the two of us* or *the three of them*, in which, again, the number is already known.

In the light of the semantic-pragmatic divisions we have adopted to compare the prenominal and NP-external constructions, we can argue that the appositive construction operates in the domain of definiteness. It is in this domain that the usage of the pre-nominal construction and the appositive construction overlaps. However, the pre-nominal construction and the appositive construction should not be thought of as simply interchangeable. As mentioned above, the appositive construction allows the numeral-classifier pair to occur with referential nominals, while the pre-nominal construction does not:

(3)'*Shingo-wa futa-ri-no Fusako to kodomo nemutte-iru
S.-TOP two-CL-GEN F. and child sleeping-is
yoko-o tootte, chanoma-ni hairu to, ...
side-ACC passing living room-LOC enter and

This purely anaphoric characteristic of the appositive construction explains its restricted occurrence. As Downing’s data shows, the occurrence of the appositive construction is restricted, compared to the other two constructions:

"Constructions of Type 2 [appositive construction] appear with a rather low frequency in the same sample I considered, constituting only 13 (6%)"

"..." (Downing 1996: 228)

Downing attributes such a low occurrence in her data to her decision to exclude examples which involve particle deletion. However, Oki (1986: 18-9) also notes the very infrequent occurrence of this construction in a novel in which he searched for various quantifying constructions.
Note also that this construction is often used as a fixed expression to emphasise that there is "only one" of the entity:

(22) Haha-no nakunatta yoru, hitobito-no doojoo wa
    mother-GEN died night, people-GEN sympathy TOP
    Kaeko hito-ri-ni astumarimashita.
    K. one-CL-DAT gathered
    'The night that Mother died, everyone's sympathy fell on Kaeko alone.'
    (Downing 1996)

The appositive construction with 'one' often appears in a negative context as well to emphasise 'not even one':

(23) Hito hito-ri i-nai. (H)
    person one-CL exist-NEG.
    There is not even one person (in sight).

We have shown that the appositive construction operates in the domain of definiteness, and thus its usage overlaps with that of the prenominal construction. The purely anaphoric purpose of its use is reflected in the restricted occurrence of this construction compared to the other two constructions. Other characteristics of this construction were also noted, such as the fact that it allows a numeral-classifier pair to appear with referential nominals as well as the fact that it can be used to emphasise singularity of the referent. For the reason that the appositive construction occurs in environments quite different from the other two constructions, we will not analyse this construction any further.
5. Restrictions on the occurrence of the NP-external construction in the light of its semantics

Our next task is to examine whether the semantics of the NP-external construction can help explain the restricted occurrence of this construction, i.e. the NP-external construction cannot be used when the quantified referents are specific definite, but only this construction can be used when the referent is non-specific. In our examination so far, we have only looked at examples in which quantified referents were expressed in the nominative or accusative case. There are further restrictions, however, on the occurrence of NP-external constructions, and scholars have attempted to define these from various points of view. However, none of the rules proposed so far have been able to account for certain anomalous cases. Below, we sketch the different types of accounts, point out the anomalies and re-examine them in the light of the semantics of the NP-external construction.

5.1 Grammatical approaches

It is generally understood that the NP-external construction can only occur with subjects and objects, as in (24) and (25), but cannot occur with indirect objects (26) or with noun phrases with oblique cases (27).

(24a) Go-nin-no gakusei-ga kita.
five-CL-GEN student-NOM came

(24b) Gakusei-ga go-nin kita.
student-NOM five-CL came
‘Five students came.’

(25a) Taroo-ga go-satsu-no hon-o katta.
T.-NOM five-CL-GEN book-ACC bought
This distributional pattern is confirmed quantitatively by Downing’s (1996) data:

“All but one (99%) of the Q-Float examples in my sample were subjects or direct objects. Except when the case marker was ellipted (2 cases) or replaced by the topic marker wa (17 cases) or the additive marker mo (1 case), all subjects bore the nominative marker ga and all direct objects the accusative marker o.” (Downing, 1996: 239)

Kuno (1978) and Okutsu (1969, 1974) suggest that the constraints are governed by grammatical relations, and that the NP-external construction can only occur with subjects and direct objects. Kuno (1978) notes, however, that a ni-marked subject (or dative subject), does not float quantifiers. Pointing to this fact, Shibatani (1977, 1978) suggests that the
constraints are governed by the grammatical case of the quantified argument rather than grammatical relations:

(28a) Korera-no san-nin-no gakusei-ni furansugo-ga
      these-GEN three-CL-GEN student-DAT French-NOM
      wakarimasu.
      understand
      ‘These three students understand French.’

(28b) *Korera-no gakusei-ni san-nin furansugo-ga wakarimasu.
      (Shibatani 1978)

He thus relates the restrictions on the Q-Float construction to the case hierarchy: Q-Float only occurs with cases higher in the hierarchy, such as the nominative and accusative cases.

However, the *ni-marked noun phrase (or noun phrase in the dative case, which can express syntactic relations such as indirect object, goal of motion verb or dative subject), which is ranked in the middle of the case hierarchy, presents anomalies to rules on the restrictions of NP-external constructions. For example, as noted, quantifiers do not usually float from an indirect object, as seen in (29) below:

(29) *Boku-wa kodomo-ni san-nin hon-o yatta.
      I-TOP child-DAT three-CL book-ACC gave
      ‘I gave (the) three children books.’
      (Shibatani 1978)

However, Kuno (1977, 1978), with a slight hesitation, allows an indirect object to occur with an NP-external quantity expression as in (30) below:
Chapter 5

(30) (?)Tomodachi-ni *shi-go-nin* tegami-o kaita.
friends-DAT four-five-CL letter-ACC wrote
'I wrote letters to four or five of my friends.'
(Kuno 1978)

Shibatani (1978) also recognises that quantity expressions sometimes appear NP-external to indirect objects:

(31) *Boku-wa kankoku-de gengogakusha-ni go-roku-nin*
I-TOP Korea-LOC linguist-DAT five-six-CL
*shookais-are-ta.*
introduce-PASS-PAST
'I was introduced to five or six linguists in Korea.'
(Shibatani 1978)

(32) *Kado-o magatta tokoro-de, boku-wa shiranai hito-ni ni-san-nin dekuwashita.*
corner-ACC turned place-LOC I-TOP unknown person-DAT
two-three-CL ran-into
'I ran into a few strangers when I turned around the corner.'
(Shibatani 1978)

He tentatively explains that this construction can occur when there is no direct object.

Inoue (1978) points out that quantity expressions occur externally to *ni*-marked and *o*-marked noun phrases which are not typical indirect or direct objects such as in (33) and (34):
Thus, she suggests that NP-external constructions can occur with the obligatory arguments of some intransitive verbs. To this, Haig (1980) adds more grammatical examples:

(35) *Kyonen* fuyu-yama-ni *too* gurai nobotta yo.

last year winter-mountain-DAT ten about climbed SP

‘Last year I climbed about ten winter mountains’.

(Haig 1980)

Note, however, that the quantity expressions in all of the grammatical NP-external constructions with *ni*-marked noun phrases are not exact numbers but approximate numbers such as *shi-go-nin* ‘four or five people’, *ni-san-gen* ‘two or three places’ or *too gurai* ‘about ten’. Pointing out this fact, Haig (1980) states that “inspection of Kuno’s and Inoue’s examples indicates that floating from non-subject, non-object NPs is
usually better when the quantifiers are approximate” (1980: 1066). Thus, he amends the case hierarchy-based Q-Float restriction rules to include (1) “restriction of QF to objects, ga-marked subjects, and obligatory case frames generally and (2) “allowing floating from indirect objects only when the quantifier is approximate” (1980: 1073).

Miyagawa (1988, 1989) agrees with Inoue’s view that NP-external constructions can also occur with some ni-marked noun phrases as long as they are arguments of verbs such as au ‘meet’ and ataru ‘inquire’ which have “quasi-objects” in their case frames. However, he claims that quantifiers do not float from ni-marked noun phrases if they are only adjuncts

“While we have seen that the NP marked with ni is an argument for verbs au ‘meet’ and ataru ‘inquire’, the examples below show that the goal NPs marked with ni for the verb iku ‘go’ and kuru ‘come’ are not arguments, but rather adjuncts, of these verbs.” (Miyagawa 1988: 166)

The reasons why he rejects the possibility of this type of ni-marked noun phrase allowing quantifiers to occur NP-externally are based on Miyagawa’s theory that an NP-externally placed quantifier is a predicate of the noun phrase2 and that restrictions on NP-external placement of

2 Miyagawa (1988, 1989) claims that the NP-external quantifier is parallel to a “small clause” in English. For example, raw and nude in John ate the meat raw and John ate the meat nude are the predicates of the noun phrase the meat and John respectively (See Williams, 1980; Rothstein, 1983; Culicover and Wilkins, 1986 for the theory of predication). He points out the similarities between the English small clause and the NP-external quantifiers: (a) both are syntactically separate from the noun phrase they modify; (b) neither is an argument of the verb; and (c) both generally modify subjects and direct objects.
quantity expressions are ruled by the internal structure of a constituent. Miyagawa (1989: 27-41) calls this condition the “mutual c-command condition” and argues that the noun phrase and its NP-externally placed quantifier should be in a hierarchical relationship where each is immediately dominated by the same node, at least in the d-structure. Miyagawa (1989) claims that the reason that adjuncts cannot have an NP-external quantifier, while subjects and objects can, is because the constituent structure of an adjunct is different from that of the subject and object NP. He explains that the former is a constituent whose head is an noun phrase and the latter is a constituent whose head is a postposition, and he claims that the “PP node prohibits the NP [within the PP] from c-commanding the [quantifier]” (Miyagawa 1989: 32). He gives examples such as the one below as an ungrammatical instance of an adjunct (oblique noun phrase) with an NP-external quantifier:

(36) *Kodomo-tachi-wa kooen-ni futa-tsu itta.
child-PL-TOP park-LOC two-CL went

‘The children went to (the) two parks.’
(Miyagawa 1988)

However, whether to consider the ni-marked noun phrase denoting “goal” as an adjunct or not may be debatable; Haig (1980) considers such a noun phrase to be an obligatory argument of the motion verb, and he considers that it does allow a floating quantifier, as shown in example (37) below:

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3 Miyagawa (1989) argues the importance of how the mutual c-command condition has to be met in the d-structure rather than in the s-structure, by taking examples of sentences with unaccusative verbs and passive sentences, where the surface subject is thought to be derived from an object in the VP in the d-structure.
(37) Meshiya-ni ni-san-gen ikimashita.
eateries-DAT two-three-CL went
'I went to two or three eateries'.
(Haig 1980)

a. Re-examination of ni-marked noun phrases

We have so far shown that while scholars agree that NP-external constructions can occur with noun phrases in nominative and accusative cases, as far as ni-marked noun phrases are concerned, further investigation is necessary.

Now, let us re-examine this phenomenon in the light of the non-specific reading of the referents. We start with Martin’s (1975) observation of the indefinite nature of a ni-marked noun phrase occurring with the NP-external quantity expression. Although the commonly held view among linguists is that there are restrictions on where NP-external constructions can occur, Martin (1975) holds the view that, although there are restrictions in written texts, NP-external constructions occur with noun phrases other than subjects and objects in spoken language, including noun phrases in oblique cases such as kara ‘from’, to ‘with’, ni ‘to’ or ‘at’, and e ‘to’:

"It is sometimes held that adverbialization of the number is possible only when the noun is marked by ga or o, but this is not quite true; ‘N kara/to/ni/e/Number’ are infrequent in print but they occur in conversation.” (Martin 1975: 779)

Martin (1975) points out that ni-mai ‘two pieces’ in the following sentence is referring to indefinite referents, and that the sentence means:
'I wrote characters on two of the pieces of paper' and not 'I wrote characters on [the] two pieces of paper'' (1975: 779):

(38) *Irogami-ni ni-mai ji-o kaita.*

coloured paper-on two-CL characters-ACC wrote

'I wrote characters on two of the pieces of paper.'

(Martin 1975)

Let us take Martin's observation further and re-examine the examples with *ni*-marked noun phrases which scholars accepted as grammatical. We repeat the examples below:

(30) (?) *Tomodachi-ni shi-go-nin tegami-o kaita.*

friends-DAT four-five-CL letter-ACC wrote

'I wrote letters to four or five of my friends.'

(Kuno 1978)

(31) *Boku-wa kankoku-de gengogakusha-ni go-roku-nin shookais-are-ta.*

I-TOP Korea-LOC linguist-DAT five-six-CL introduce-PASS-PAST

'I was introduced to five or six linguists in Korea.'

(Shibatani 1978)

(32) *Kado-o magatta tokoro-de, boku-wa shiranai hito-ni ni-san-nin dekuwnshita.*

corner-ACC turned place-LOC I-TOP unknown person-DAT two-three-CL ran-into
‘I ran into a few strangers when I turned around the corner.’
(Shibatani 1978)

(33) Watashi-wa dantai-kyaku-o tomeru yadoya-ni
I-TOP party-traveller-ACC accommodate inn-DAT ni-san-gen atatte-mita.
two-three-CL inquiring-tried
‘I tried at two or three of the inns that put up group travellers.’
(Inoue 1978)

(35) Kyonen fuyu-yama-ni too gurai nobotta yo.
last year winter-mountain-DAT ten about climbed SP
‘Last year I climbed about ten winter mountains’.
(Haig 1980)

(37) Meshiya-ni ni-san-gen ikimashita.
eateries-DAT two-three-CL went
‘I went to two or three eateries’.
(Haig 1980)

As Haig points out, the quantity expressions in these examples are all approximate numbers. Wouldn’t it be possible to explain that these examples are acceptable because the referents can be interpreted not only as indefinite but also as not necessarily specific? We seem to get an impression that the speaker is not committed to the specificity of these referents. However, the quantified entities in the above examples are in the past tense, and thus the speaker should be committed to their existence, i.e. they should be specific. How do we explain this conflict? We should recall Givón’s (1993: 225-8) observation (see Section 2 of
Chapter 3) that in English even in a realis assertion, entities expressed by a noun phrase in the plural can be interpreted as non-specific and that the speaker can intentionally choose the plural form to achieve this effect. Givón suggests that in such cases the plural noun phrases are not non-specific in the strict logical-semantic sense but they are non-specific in a pragmatic sense, i.e. "their specific identity doesn’t matter" (1993: 226).

There appears to be a similar relationship between the singular vs. plural contrast and the interpretation of (non-)specificity, and that between the exact vs. non-exact number contrast and the interpretation of (non-)specificity. Just as it is more probable for a noun phrase in the singular to be referring to a specific referent, it seems more probable for entities quantified by exact numbers to be interpreted as specific than those quantified by non-exact numbers. Exact numbers would demarcate and bound the entities by that number, which has the effect of helping to refer to particular entities. On the other hand, non-exact numbers do not have the same force of helping to demarcate and identify the referents. Thus, we can speculate that there is a different degree of intention by the speaker reflected in the use of either exact numbers or non-exact numbers. When the speaker uses an exact number, he is more committed to refer to particular entities. On the other hand, there seems to be a lack of commitment to refer to particular entities when he chooses

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4 Taking examples from cross-linguistic data, Givón (1984: Chap 11) discusses in detail how pragmatic factors, such as whether specificity of the referent matters or not in the immediate discourse and whether or not the referent will get a subsequent mention, are reflected in the marking of (non-)specificity of the noun. Hopper and Thompson (1984) also discuss "discourse (non-)manipulability". They argue that to a degree the speaker manipulates the marking of a noun to reflect the discourse value of the referent, i.e. whether the noun has "some notion of salience, prominence, or relevance in the discourse (720)"
to use a non-exact number. This is may be because their specific identity does not matter in the immediate discourse/text. It is in this pragmatic sense that entities quantified by non-exact numbers in the above examples are non-specific. If Givón's observation regarding the singular and plural effect of the noun phrase and the interpretation of (non-)specificity is plausible, then it is equally plausible to argue that a speaker can intentionally use approximate numbers to induce an non-specific interpretation, even in realis contexts. The NP-external construction is permissible with the ni-marked noun phrases in the above examples because the speaker/writer intends to refer to the quantified entities as non-specific in a pragmatic sense.

Furthermore, as we will see in detail in Chapter 8, although quantity expressions such as ni-san-CL 'two or three' or go-roku-CL 'five or six' contain numerals, consecutive numerals such as these in Japanese, in their semantic function, correspond to English quantity expressions such as a few, some and several, which are strongly associated with at least an indefinite reading of the referents, if not non-specific (see Section 3 of Chapter 3). Quantity expressions such as oozei 'many (people)' or takusan 'many, much' thus also induce a less specific reading.

Interestingly, the ni-marked examples which Saji (1969) judges to be grammatical contain phrases which induce a low degree of specificity:

(39) Asakusa atari-no baa-e ni-san-gen

A. vicinity-GEN bar-LOC two-three-CL

tsurete-ikar-ere-ta.

taking-go-Pass-Past

'I was taken to two or three (a few) bars around Asakusa.'

(Saji 1969)
In (39), the speaker is not very committed to the specificity of the bars he went to. This is shown firstly by the use of Asakusa atari ‘somewhere around Asakusa’, which only roughly gives locational information about the bars. Secondly, the number is approximate, which further contributes to the less specific identification of the bars he is talking about. In (40), although the number is exact, soo-iu ‘of that kind’ refers to a certain category of places and makes the identity of the places he went to less specific.

Let us now re-examine Miyagawa’s (1988) ungrammatical example with non-specificity increasing factors such as propositional modalities and approximate numbers in mind. He claims that the ni-marked noun phase of the verb iku ‘go’ does not permit the quantity expression to occur NP-externally. His ungrammatical example is repeated below.

(36)*Kodomo-tachi-wa kooen-ni futa-tsu itta.
child-PL-TOP park-LOC two-CL went
‘The children went to two parks.’
(Miyagawa 1988)

However, if we increase the non-specific reading of the goal denoting noun phrase, we get a grammatical sentence:

(41) Doitsu-ni it-tara, otogibanashi-ni dete-kuru
Germany-LOC went-if fairy tale-LOC appearing-come
Native speakers whom I have consulted all accepted (41). Three factors are responsible for increasing the degree of non-specificity of the goal noun phrase here. Firstly, *yoo-na 'like’ refers to any member of a category of places, and thus the places talked about are highly non-specific. Secondly, the non-numerical quantity expression *ikutsuka 'a few’ could induce a higher non-specific reading. Finally, the desiderative mood is associated with non-specificity. Thus, the quantity expression can occur NP-externally. Miyagawa’s argument vs. adjunct theory is not adequate to explain the grammaticality of (41).

Let us now re-examine other *ni-marked examples which are considered to be ungrammatical. Shibatani judges example (29), which contains an indirect object with an NP-external quantity expression, to be ungrammatical. The example is repeated below:

(29) *Boku-wa kodomo-ni san-nin hon-o yatta.

'I gave (the) three children books.'

(Shibatani 1978)

This sentence is in the past tense and the number of children to whom books were given was an exact number *san-nin 'three people'. It is difficult for referents (children) who actually existed in the past and whose number is expressed by an exact number to denote a high degree of non-specificity and thus to be expressed in the NP-external construction.
Let us compare (29) to the example Kuno (1978) assesses as allowable but not fully grammatical. The example is repeated:

(30) (?)Tomodachi-ni shi-go-nin tegami-o kaita.
friend-DAT four-five-CL letter-ACC wrote
‘I wrote letters to four or five friends’.

His hesitation may come from the fact that the past tense, which is factual, tends to associate with specificity. However, if we combine the verb in (30) with an irrealis mood such as intention, the acceptability seems to increase. Native speakers whom I have consulted all accepted (42):

(42) Kookoo-jidai-no tomo-dachi-ni ni-san-nin
high school-time-GEN friend-PL-DAT two-three-CL
tegami-o kaite-mi-yoo kashira.
letter-ACC writing-try-VOL I wonder
‘Maybe I should write letters to some friends from high school.’

In (42) the probability of a non-specific reading of the tomodachi is high as the speaker is entertaining thoughts about writing letters and she may not even have decided who to write to, thus the NP-external construction is preferred.

A non-numerical quantity expression such as takusan ‘many, much’ or oozei ‘many (people)’ also makes the NP-external placement of a quantity expression more acceptable, even if the verb is in the past tense:
Tomodachi-ni oozei tegami-o kaita.
friend-DAT many letter-ACC wrote
'I wrote letters to many friends.'

The semantics of non-numerical quantity expressions such as oozei 'many (people)' must have the same kind of effect as a plural noun phrase in English for inducing non-specific reading.

The grammaticality of sentences such as (42) and (43) cannot be explained by Shibatani's tentative suggestion that the quantity expressions can occur external to the indirect object only when there are no direct objects, since direct objects are present in both (42) and (43). Furthermore, Inoue's argument that quantity expressions occur externally to ni-marked noun phrases which are not typical indirect objects is not valid as the ni-marked noun phrases in (42) and (43) are typical indirect objects.

Next, let us re-examine the case of dative subjects. Shibatani gives the following sentence as an example where a quantity expression does not float from a dative subject. The examples are repeated:

(28a)Korera-no san-nin-no gakusei-ni furansugo-ga
these-GEN three-CL-GEN student-DAT French-NOM wakarimasu.
understand
'These three students understand French.'

(28b)*Korera-no gakusei-ni san-nin furansugo-ga wakarimasu.

Let us look at the ungrammaticality of (28b) in the light of semantic factors. The dative subject gakusei-ni '(to) students' in both (28a) and (28b) refers to definite referents which are lexically marked by the
demonstrative *korera no* 'these'. This definite reading of the noun phrase conflicts with the indefinite reading of the quantified referents assumed by the NP-externally placed quantity expression in (28b). In the following example, the quantified members are non-specific and the predicate is in an irrealis mood. Most of the informants I have consulted agree that it is grammatical:

(44) (?)Guruupu-no *hito-ni* *ni-san-nin* *eigo-ga*

*group-GEN person-DAT two-three-CL English-NOM*

*wakar-eba, *gaido-no* *shigoto mo zuibun*

*understand-if guide-GEN work also considerably*

*raku-ni* *naru. *

*comfortable become*

‘If two or three people in the group understand English, the work of a tour guide becomes much easier.’

However, compared to other *ni*-marked noun phrases, it was harder for informants to agree on the grammaticality of an example with a dative subject with an NP-externally placed quantity expression. The reason may be attributed to a pragmatic constraint that a dative subject tends to be specific. This needs further investigation.

The above observations have shown that the non-specificity of a referent can account for the occurrence of the NP-external construction with a *ni*-marked noun phrase, regardless of whether it is an indirect object or a goal of a motion verb. From a pragmatic point of view, it would be interesting to find out how often *ni*-marked noun phrases refer to non-specific referents compared to those in nominative and accusative cases.
b. **Re-examination of oblique cases**

On the one hand, we have a general consensus that the NP-external construction does not occur with oblique cases, on the other hand we have Martin’s conviction that in spontaneous speech this construction can occur with noun phrases in oblique cases such as *kara* ‘from’, *to* ‘with’, *ni* ‘to’ or ‘at’ and *e* ‘to’. The quantitative research by Downing (1996), however, supports the general consensus. Although referents are frequently introduced in oblique slots in her data, there was no example of an oblique noun phrase with a floated quantifier. She relates this phenomenon to the pragmatic importance of the newly introduced referents in the story. She claims that only those referents which are going to persist in the story tend to merit quantification, either by a pre-nominal construction or by a NP-external construction. She speculates that as oblique referents merely act as “props”, they tend not to form a theme and thus do not get quantified when they are newly introduced: “such referents rarely merit the attention that introduction with a quantifying expression represents” (1996: 257). Her explanation is highly to the point, but only in terms of describing the likelihood of the occurrence of the NP-external construction from a pragmatic point of view.

Although we do not have attested examples of oblique noun phrases with NP-externally placed quantity expressions, it is worth investigating the acceptability of cases where referents are highly non-specific. Let us start with Kuno’s (1978) example which he uses to argue that oblique noun phrases do not float quantifiers, while their corresponding pre-nominal constructions are grammatical.

(45a)  

\[
\text{Otoko-tachi-wa yon-ken-no mise-de meshi-o} \\
\text{man-PL-TOP four-CL-GEN shop-LOC meal-ACC}
\]
The quantity expression \textit{yon-ken} 'four CL' is an exact number and the sentence is in the past tense. What about the following sentence, where the quantified referent has a strong non-specific reading?

(46) \textit{Geinoojin-ga dehairi-suru yoo-na mise-de ni-san-gen hataraite, keiken-o tsum-eba.}

movie-star-NOM frequent like shop-LOC two-three-CL working experience-ACC accumulate-if

'Why don’t you get some more experience by working in a few places where movie stars are likely to go.'

Most of the informants I have consulted agree that (46) is quite grammatical. In this example, ... \textit{yoo na mise} 'places such as ...', denotes a \textit{type} of place and expresses a high degree of non-specificity. Also the predicate is in an irrealis mood of suggestion. Thus, a highly non-specific reading of the nominal is ensured, and the quantity expression can occur outside the noun phrase, resulting in a grammatical sentence.

Let us next look at a noun phrase bearing the source marker \textit{kara}. Again we have a sentence where the noun phrase is high in non-specificity and the verb is in a non-factual mood:
(47) Nihon-ni kyoomi-ga aru yoo-na hito kara
Japan-LOC interest-NOM exist like person from
oozei toiwase-ga kuru to omou.
many-people inquiry-NOM come QUO think
‘I think inquiries will come from many people of the kind
who are interested in Japan.’

Most of the informants I have consulted agree that (47) is again grammatical.

The informants also agreed that a noun phrase with a commitative marker could co-occur with an NP-external quantity expression:

(48) Nihon-ni kyoomi-ga aru yoo-na hito to
Japan-LOC Interest-NOM exist like person with
nan-nin-ka tsukiatte-mi-tai.
a few go out-see-DES
‘I want to go out with a few people of the kind who are
interested in Japan.

The above observations have shown that quantifiers can occur NP-externally with oblique noun phrases in certain situations, and thus confirm Martin’s conviction. The observations suggest that a higher probability of the quantified referents to be interpreted as non-specific is a necessary condition for the quantity expression to occur NP-externally. Factors we have pointed out as contributing to a non-specific reading are irrealis mood and the lack of speaker commitment to express an exact number of referents.

Thus, it is not appropriate to rule out the possibility that the NP-external construction occurs with oblique noun phrases strictly according
to the case hierarchy as most previous studies have suggested. However, the reality is that we do not often see these kind of examples, and Downing’s pragmatic reasoning provides a convincing explanation for this.

5.2 Semantic/pragmatic approach

Downing (1996) points out that not only do NP-external constructions occur predominantly with subjects or direct objects, but that the types of subjects with which this construction occurs are *intransitive subjects*. Intransitive subjects and direct objects are often understood to be the theme of a sentence semantically; a participant in the event which is “affected” either by being moved or changed as a result of the action or event (see Jackendoff 1972; Anderson 1977). Thus, Downing puts forward the generalisation that “Q-Float [NP-external construction] *tends* to be used in the quantification of themes” (1966: 256), and suggests pragmatic constraints:

“The absolutive distribution of the Q-Float [NP-external] construction can be seen as a reflection of pragmatic constraints on the slots in which important new referents will be introduced into text.” (Downing 1996: 259)

However, as Downing herself is aware, her pragmatic constraints have inadequacies. She cannot explain why the NP-external construction also occurs, although rarely, with a transitive subject, which is dispreferred as a slot for a theme, or why it does not occur with oblique noun phrases in which new referents may be introduced:

“If the syntactic distribution of this construction is motivated by semantic and/or pragmatic factors of the sort I have outlined, why is the use of Float *permissible* in cases where these factors are not at work? Why, for
instance, do native speakers find it grammatical to quantify agentive transitive subjects with Float? And why is Float impermissible with oblique NPs, regardless of the textual status of the referent to which they refer.” (Downing 1996: 260)

Furthermore, Downing is also hesitant to include the subjects of existential sentences—which constitute 30% (in both oral and written text) and 40% (in oral text only) of NP-external constructions. This is because the subject of an existential verb is not generally understood to have the semantic characteristics of a theme. However, this can be explained by our hypothesis put forward in Section 3.2. We proposed that the NP-external construction expresses indefiniteness of the quantified referent. Subjects in the existential construction are generally observed to be indefinite in nature, and thus can be expressed by the NP-external construction.

What about the transitive subject? It may not be a theme, but it can refer to a referent which may be indefinite. Downing was aware of the semantic nature of the transitive subject which allowed NP-external placement of quantity expressions in her corpus:

“Of the Q-Float sentences in my corpus which do involve a transitive subject, only one could be characterized as a prototypical transitive, i.e. one in which a volitional agent carries out a punctual action which affects an individuated object .... The remaining clauses which involve Q-Float quantification of “transitive” subjects clearly do not represent canonical transitives, because they involve non-punctual states, non-volitional agents, and/or abstract, effected, or traversal objects. Use of the Q-Float construction to quantify truly transitive subjects thus appears to be quite rare, if my data can be taken as characteristic.” (Downing 1996: 240)
Downing did not give actual examples of transitive sentences in her study. However, I would speculate that her transitive subjects which occurred with NP-external quantity expressions are indefinite and non-specific. For instance, both of the following examples which have transitive subjects are perfectly grammatical with an NP-external quantity expression:

(49) Saikin wakai onna-no-hito-ga oozei
recently young woman-NOM many-people
gaiisha-o kau yoo-ni narimashita.
imported-car-ACC buy like became
‘Recently more young women are buying imported cars.’

(50) Gakusei-ga nan-nin-ka tsuishi-o
student-NOM a few-CL supplementary exam-ACC
mooshikonde-kuru-deshoo.
applying-come-probably
‘A few students will probably apply for a supplementary exam.’

The quantified referents in (49) and (50) are indefinite. Our hypothesis is valid in explaining the occurrence of the NP-external construction with the transitive subjects. Thus, although there is a correlation between the semantic theme and the occurrence of the NP-external construction, as Downing’s data shows, such a correlation should only be interpreted as a pragmatic likelihood and not as a rule.

The examination in this section suggests that a semantic factor, i.e. whether the quantified referents are highly non-specific or not, plays an important role in understanding the restrictions on the occurrence of NP-external constructions. The examination also suggests that there is more
than one operating factor at work governing the occurrence of NP-external constructions. These factors include: stylistic difference, case hierarchy, the pragmatic likelihood of which noun phrase tends to get a mention of its quantity when the referent is newly introduced, and the degree of specificity of the quantified referents.

6. Summary

In this chapter we have shown that the semantic domains of indefiniteness and specificity can be expressed by the different syntactic positions of quantity expressions in Japanese. We have argued that the NP-external construction syntactically reflects the domain of indefiniteness, while the pre-nominal construction reflects the domain of specificity. Furthermore, we have shown that the meaning of the NP-external construction can account for some of the anomalies of previously proposed constraints, i.e. when the quantified referent is non-specific, even noun phrases occurring in cases other than nominative and accusative cases can float quantifiers.

Having successfully ascertained the semantics of the pre-nominal and NP-external constructions, we can conclude that there is syntactic skewing between the expression of quantification in English and in Japanese. The quantity of referents are predominantly expressed pre-nominally in English, regardless of the definite vs. indefinite or specific vs. non-specific reading of the noun phrase, while in Japanese such differences are reflected in the different syntactic positions of the quantity expressions.

It is difficult to describe this kind of skewing between the two languages within Halliday and Catford’s framework of shifts. This is because the semantic domains are expressed by different syntactic positions within one language.
6

Quantification of Entities in the Existential Sentence

1. Introduction

In this chapter, we will examine the complex skewing in existential sentences in English and Japanese. In Sections 2, 3 and 4, we will describe the formal discrepancies which involve class-shift as well as rank-shift and make clear what we mean by the basic existential sentence and the existential sentence with marked quantity.

In Section 5 we will show that in both languages frequency adverbs can also carry existential meaning and provide semantic accounts for such a common phenomenon. We will point out that interchangeability with frequency adverbs in existential sentences is more restricted in English, and will attribute the restriction to the different syntactic configurations in both languages. In Section 6 we will briefly point out that some predicative adjectives present a more opaque case of skewing of an existential message.

2. Skewing in existential sentences

We observe sentences in Japanese produced by students of English-speaking background such as:

(1) ?Aru oosutorariajin-wa tako-o taberu.
   certain Australian-TOP octopus-ACC eat
   'Lit.: A certain Australian eats octopus'
   'Some Australians eat octopus.'
(1) is not a natural sentence in Japanese to convey the meaning *Some Australians eat octopus*. *Aru* in (1) is certainly an equivalent of *some* when it is used to refer to a specific referent, i.e. "one particular Australian that the speaker knows". As far as the intention of the sentence *Some Australians eat octopus* is concerned, however, *some* does not have a specific meaning. Thus *aru* 'a certain' should not be used. The reason why students construct a sentence like (1) is because they transfer the English syntactic structure item for item into Japanese.

If (1) is not a natural sentence, what is the corresponding Japanese sentence which we intuitively judge to be conveying the meaning of the English sentence? The corresponding Japanese sentence is strikingly different:

(2) *Tako-o taberu oosutorariajin mo iru.*  
 octopus-ACC eat Australian also exist  
 'Lit.: Australians who eat octopus also exist.'

Let us analyse the nature of the syntactic skewing involved in (2) and its frequently used counterpart in English, (3):

(3) *Some Australians eat octopus.*

In Japanese *oosutorariajin* 'Australians' forms a head noun of a subject noun phrase, accompanied by a noun modifying clause which describes the property *tako o taberu* 'eat octopus', and the existential meaning is expressed by the existential verb *iru* (*iru* for animate referents, or *aru* for inanimate referents) as a main predicate. In English, the corresponding *Australians* also forms the head noun of a subject noun phrase.
accompanied by a quantifier some, and the property eat octopus is expressed by the main predicate. Furthermore, there is no corresponding quantity expression for some in Japanese. There is thus a rank-shift in how the predicate eat octopus is expressed between the two languages—in English it appears as a main predicate and in Japanese it appears as the predicate in a relative clause. The corresponding quantifier for some is absent in the Japanese sentence, and instead, the verb iru is present. In order to explain such complicated shifts, we have to examine the semantic nature of existential sentences.

Note that the English sentence There are Australians who eat octopus is grammatical and syntactically corresponds to the Japanese existential sentence. However, the sentence structure of Some Australians eat octopus seems to be the predominantly used pattern in English for conveying generic existential meaning and thus merits an examination as an instance of skewing from the Japanese counterpart.

3. The semantics of some as an existential quantifier

In English, the semantic function of some in Some Australians eat octopus approximates that of an "existential quantifier". Lyons (1977: 455) states: "The word 'some' is usually taken to be the English-language equivalent of the existential quantifier". The semantics of some in such a case is to put forward the concept that "there exists at least one member of a certain category".

If we look at sentences (2) and (3) in the light of the existential meaning conveyed by the quantifier some in English, the intuitive synonymity between the two structurally different sentences starts to make sense: some in the English example implies that there is more than just one Australian who eats octopus. This paraphrased structure is reflected in the Japanese structure, where the meaning of existence is
expressed by the existential verb *iru* and a category of individuals is expressed as a noun phrase with *oosutorariajin ‘Australians’* as a head noun modified by a relative clause *tako o taberu ‘who eat octopus’*. As the semantic function of the existential quantifier *some* is not to express any specific quantity, we find no quantifier in the Japanese counterpart. Instead the existential meaning is conveyed by the verb *iru*.

This concords with Weinreich’s observation that “Every language has signs for existential quantifiers. This semiotic class intersects with grammatical division into parts of speech and some of their subdivisions” (Weinreich 1972: 160). If we examine the corresponding English and Japanese existential sentences in the light of the relationship between the underlying semantic configuration of the existential message and the surface representation, it is clear that the Japanese structure (2) reflects the semantic proposition more congruently than the English counterpart (3).

The type of sentence structure we are examining here is a ‘generic’ existential sentence which concerns the existence of a category of entities which share a certain common property and not the existence of a particular member of a class at a particular location. Separating the core meaning of existence from location, Lyons (1977: 723) argues that existence is non-deictic: “existence is but the limiting case of location in an abstract, deictically neutral, space”.

Note that in English there are alternatives to *some*. For example, *others* is often used when categories of entities are contrasted with each other:

(4) *Some* people collect old coins or foreign stamps, *some* do needlework, *others* spend most of their spare time on a particular sport. (sw)
The existential meaning carried by some can be expressed by any or no, depending on whether the existence of a category of entities is questioned or denied.

(5) Would anyone have such a hobby?
(6) Nobody would have such a hobby.

In Japanese, interrogation or negation is expressed elsewhere:

(7) Sonna shumi-no hito-ga imasu ka
    like that hobby-GEN person-NOM exist-POL Q
    ‘Lit.: Do people with such a hobby exist?’
    ‘Would anyone have such a hobby?’

(8) Sonna shumi-no hito-wa i-nai.
    like that hobby-GEN person-TOP exist-NEG
    ‘Lit.: People with such a hobby do not exist.’
    ‘Nobody would have such a hobby.’

The discourse particle mo ‘also’ or ‘in addition’ is often used in the existential sentence, communicating a meaning like “a category such as this also exists in addition to many other possible categories in the universe”. Mo replaces the case particle ga (nominative case maker) and alternates with the discourse particle wa (topic marker). We will use whatever particle seems natural in the example sentences in the following discussion.
4. Existential sentences with marked quantity

In the existential sentences we have examined above, the number of entities in a category is neutral as Lyons states (1977: 150): “Whether there is only one or more than one such individual is irrelevant”. However, Lyons also states that words such as many and few can be thought of as an extension of some in the existential quantification: “in certain of their uses at least, [such words] can be said to have much the same function as the logician’s quantifiers” (1977: 454). In Section 7.1 of Chapter 2, where we discussed the characteristics of the non-numerical quantity expressions, we noted Leech and Svartvik’s (1975: 64) comment that amount words such as many and few denote amounts which “specify more precisely the meaning ‘some’”. Thus, we will now expand these observations by looking at cases where the meaning of an existential sentence is augmented with non-numerical quantity expressions such as many, a few, little and their rough equivalents in Japanese.

In Section 7.1 of Chapter 2 we also pointed out that non-numerical quantity expressions do not denote any absolute value, that they can be placed relative to each other on the scale of amount, and that the quantitative values they express are highly context dependent. In Section 7.2 we also showed that the value they denote can be thought of as part of a total collection and this can be defined by the immediate context, as in many of them, or by the general understanding of a more vague whole such as humanity as a whole or the people of this city, as in Many people derive much pleasure from attending music festivals. Leech and Svartvik (1975: 65) call the latter use “the general (indefinite) use of amount words”. When we examine existential meaning with marked quantity, we are concerned with the latter, general interpretation. For convenience of discussion in this chapter, we will refer to those quantity
expressions as quantity expressions with “marked quantity” as they are more explicit in terms of their position on a scale of amount than some.

Now let us start our examination by comparing examples which contain many and few with an example with some in English below:

(9) Some people only read newspapers or comics, (sw)
(10) Many [people] also believe that sick people can be cured with the help of the supernatural. (sw)
(11) Few philosophers in more recent times have been so blasphemed and so persecuted for their ideas as this man.

(sw)

Syntactically, what happens in English is that many in (10) and few in (11) are used in the pre-nominal position instead of some. Semantically, unlike the neutral reading of some in Some people only read newspapers or comics, many in (10) explicitly expresses that “people who believe that sick people can be cured with the help of the supernatural” exist in a large number. Few in (11) expresses that “philosophers who have been so blasphemed and so persecuted for their ideas as this man in recent times” exist in a very small number. Thus, many and few convey the basic existential meaning carried by some, but with added markedness of the size of the category of such entities. In this sense, sentences such as (10) and (11) are existential, but with “marked quantity”.

How about Japanese? The following three examples illustrate a similar contrast:

(12) Tenmongaku toka ... ironna teema-ni te-o
    astronomy such as various theme-DAT hand-ACC
nobasu hito mo iru. (ss)
stretch people also exist
‘Lit.: People who would pursue various themes such as astronomy, also exist’

(13) Ima demo kaado-uranai ya tesoomi ... -o
now even card-fortune telling or palm-reading-ACC
shinjiru hito-wa takusan imasu. (ss)
believe person-TOP many exist-POL
‘Lit.: Even now people who believe in fortune-telling by cards and palm-reading exist in a large number.’

(14) Heijitsu-no hiruma-ni koko-o otozureru
weekday-GEN day time-LOC here-ACC visit
hito-wa hotondo i-nai kara da. (sk)
person-TOP (not) many exist-NEG because COP
‘Lit.: It is because there are hardly any people who come here on weekday afternoons.’

The above three Japanese examples demonstrate that Japanese also expresses existential meaning with marked quantity. Let us compare the corresponding structures in English and Japanese. From a lexical point of view, although there is no quantity expression in Japanese which expresses neutral quantity, quantity expressions with marked quantity such as takusan ‘many’ and hotondo ‘not many’ are present in (13) and (14), and roughly correspond to the English quantifiers many and few.

Note that Japanese quantity expressions exclusively appear in the NP-external position when an existential meaning is conveyed by the existential sentence. This phenomenon confirms our hypothesis that
quantified referents expressed in the NP-external construction are always indefinite.

From a skewing point of view, the existential sentences with marked quantity in the two languages thus present a more complex case of skewing. What is expressed by a quantity expression such as *many* in English class-shifts into two elements in Japanese, i.e. a quantity expression (e.g. *takusan* ‘many’) and an existential verb. At the same time the predicate of a single clause in English is rank-shifted into a relative clause in Japanese.

The observations above show that both languages express existential meaning with marked quantity, and that they do this by expanding the basic existential sentence. Marked quantity is expressed lexically with quantifiers with marked quantity in both languages. In English those marked quantifiers occur pre-nominally, simply replacing *some* in the noun phrase. In Japanese the marked quantifiers appear outside the noun phrase they quantify.

5. Shifts between spatially-oriented quantity expressions and frequency adverbs in existential sentences

In this section we will show that an existential meaning can be conveyed not only by spatially-oriented quantity expressions such as *many* and *few* and their rough equivalents in Japanese, but by frequency adverbs in both languages. We will show that English and Japanese use different syntactic structures to express existential meaning by frequency adverbs, and that because of this difference the interchangeability between the spatially-oriented quantity expressions and frequency adverbs differs in both languages.
5.1 Syntactic observation

The following is another example in Japanese produced by students of English-speaking background which illustrates the skewing of existential sentence structures:

(15) *Neko-wa tokidoki me-ga aoi
    cat-TOP sometimes eye-NOM blue
    ‘Lit.: Cats, sometimes their eyes are blue’
    ‘Cats sometimes have blue eyes.’

The ungrammaticality of this sentence is again a result of students transferring the English syntactic structure *Cats sometimes have blue eyes* item for item into Japanese. A natural sentence in Japanese which conveys the meaning of such an English structure is a typical existential sentence:

(16) Me-ga aoi neko mo iru.
    eye-NOM blue cat also exist
    ‘Lit.: Cats whose eyes are blue also exist.’
    ‘Some cats have blue eyes/Cats sometimes have blue eyes.’

Pointing out that frequency adverbs appear in existential sentences, de Swart (1993: 14-6) states that many linguists agree that frequency adverbs such as *sometimes, often* and *seldom*, such as in (17b), (18b) and (19b) below, roughly carry the same existential meaning expressed by *some, many* and *few* in (17a), (18a) and (19a).

(17a) Some cats have blue eyes.
(17b) Cats sometimes have blue eyes.
Many cats have blue eyes.

Cats often have blue eyes.

Very few cats have short tails.

Cats seldom have short tails.

From a skewing point of view, what happens in English is that the existential meaning carried by quantifiers within the noun phrase in (18a) and (19a) is carried by frequency adverbs outside the noun phrase in (18b) and (19b). Thus, there is a class-shift between a quantifier, a pre-nominal element, and a frequency adverb, a clausal element.

A sentence such as Cats sometimes have blue eyes cannot have a syntactically corresponding sentence in Japanese as seen in (15). However, frequency adverbs also carry existential meaning in Japanese:

Taihoo ya nanika-o sagasu tame-ni,
cannonball or something-ACC look for sake-LOC
kono atari-no kawa-ni moguru hito-ga yoku
this area-GEN river-DAT dive person-NOM often
iru, (si)
exist
‘Lit.: People who dive into the river around here to look for cannonballs or something often exist.’

Dokutaa gureamu-wa medikaru sukuuru-ni
doctor Graeme-TOP medical school-LOC
yoku iru yoo-na ...
often exist like
seinen datta. (sk)
young man COP-PAST
Chapter 6

‘Lit.: Doctor Graeme was the type of young man who often exists at a medical school.’

(22) Annani muchi-na ningen-wa mettani i-nai. (sk)
like that ignorant human being-TOP seldom exist-NEG
‘Lit.: A human being who is as ignorant as he is seldom exists.’

(23) Kooiu kanji-no mise-wa nakanaka nai
like this atmosphere-GEN shop-TOP seldom exist-NEG mono da. (I)
NMLZ COP
‘Lit.: Restaurants of this kind of style seldom exist.’

From a skewing point of view, however, unlike English there is no class-shift involved in Japanese, i.e. the frequency adverb appears in the same slot as a quantity expression would appear, while the existential sentence structure stays unchanged.

We have earlier noted that while the neutral size of a category is expressed by some in English, it is not expressed explicitly by a quantifier in Japanese, and that the existential verb alone is sufficient to convey the meaning. However, the frequency adverb tokidoki ‘sometimes’ optionally appears in an existential sentence in Japanese, as below:

(24) Sooiu hito mo tokidoki imasu yo (B)
like that person also sometimes exist-POL SP
‘Lit.: People like that sometimes exist.’

(25) Tokidoki sooiu koto-o suru hito-ga
sometimes like that thing-ACC do person-NOM
Rather than merely asserting that there exist a category of entities, the addition of *tokidoki* in the existential sentence in Japanese seems to express a temporally-oriented perspective of existential meaning, i.e. *from time to time* one encounters entities of that kind. The temporal characteristic of existential meaning is going to be discussed further in Section 5.2 below.

**5.2 Semantic grounds**

The interchangeability between spatially-oriented quantity expressions and temporally-oriented frequency adverbs in existential sentences in both languages suggests that there are semantic grounds which allow a shift from a spatial to temporal point of view to occur. Below we will argue two semantic reasons for this.

**a. Position on a scale of amount**

In Chapter 2, we observed that position on a scale of amount can be interpreted across different semantic domains and thus often across different word classes. This means that a certain quantity located towards the upper end of the scale can be expressed, for example, in English by terms such as *many, much, many times, often, (for) a long time, very* and *very much*. Regardless of their different word classes, Leech and Svartvik (1975) treat pronouns such as *everybody* and *everything*, adverbs of frequency and duration, and degree words as belonging to the same semantic category of words expressing amount. We can therefore view the interchangeability between spatially-oriented quantity expressions
such as *some* and *many* and frequency adverbs such as *sometimes* and *often* in the existential sentence in the light of a wider correlation between them on the scale of amount.

*b. Temporal-orientedness of existential message*

The frequency adverbs used in existential sentences do not fully convey a time-oriented notion of quantity. In order to explain this we need to introduce the fact that there are two possible readings of frequency adverbs, i.e. temporal and atemporal readings. De Swart (1993: 14-16) explains that frequency adverbs such as *sometimes* or *often* do not bear relevance to time when they are used in an existential sentence, i.e. they are atemporal. However, although the temporal characteristics of frequency adverbs may not be fully present, the reason they appear in existential sentences instead of spatially-oriented quantity expressions is because an existential message does concern temporal experience. This means that although the existential sentence denotes the existence of the entities *cats* in the existential sentence *Some cats have blue eyes*, it does not refer to entities which exist at the same point of time. As was mentioned earlier, generic existential sentences concern our experience over time. Thus, a sentence like *Some cats have blue eyes* implies a sense of encountering cats over time and thus *sometimes* finding ones that have blue eyes. It is these semantics of an existential sentence that allow the interchangeability between spatially oriented quantity expressions and frequency adverbs.

In Sections 5.1 and 5.2 above we have shown that both English and Japanese express existential messages by frequency adverbs, and we have accounted for the phenomenon from a semantic point of view. In Section 5.3 we will point out that the interchangeability between quantity
expressions and frequency adverbs occurs much more freely in Japanese and will explain why.

5.3 Difference in interchangeability between quantity expressions and frequency adverbs in English and Japanese

In Section 5.1 we noted the structural difference between English and Japanese when frequency adverbs are used to convey existential meaning: in English the pre-nominal quantity expression class-shifts to an adverbial element outside the noun phrase, while in Japanese the existential structure remains unchanged and an NP-externally placed quantity expression is simply replaced by a frequency adverb. These different structures yield an interesting contrast when we look at existential sentences with non-stative predicates. In English, a spatially-oriented quantity expression can be interchangeable with the corresponding frequency adverb without changing the existential meaning only when the predicate is stative, expressing a permanent attribute of the entity such as “having blue eyes”. In Japanese no such restriction applies.

In order to argue this point, let us first examine a pair of existential sentences in the two languages with a non-stative predicate “eat octopus” with marked quantity many:

(26) Tako-o taberu oosutorariajin mo takusan iru.

octopus-ACC eat Australian also many exist

‘Lit.: Australians who eat octopus also exist in large numbers.’

(27) Many Australians eat octopus.
In Japanese, spatially-oriented quantity expressions can be freely replaced by frequency adverbs:

(28) Tako-o taberu oosutoraria-jin mo yoku iru.
    octopus-ACC eat Australian also many exist
    ‘Lit.: Australians who eat octopus often exist.’

In English, however, it is not always the case:

(29) Australians often eat octopus.

Two interpretations seem possible for (29). One is an existential one. However, in the other interpretation, often describes a repeated event of “some Australians eating octopus again and again”. Why is that Many Australians eat octopus and Australians often eat octopus do not semantically correspond with each other while examples we have seen earlier, such as Many cats have blue eyes and Cats often have blue eyes, do? Why is it that in Japanese quantity expressions and frequency adverbs seem to interchange freely?

We speculate that frequency adverbs only yield an atemporal reading in English when the main predicate expresses a permanent state such as “having blue eyes” or “having short tails”. “Eating” refers to a dynamic event. In the Japanese structure, the frequency adverb yoku does not have an immediate syntactic association with the eventive predicate tako o taberu ‘eating octopus’, as it is outside the noun phrase in which this predicate occurs. Thus, in Japanese, regardless of whether the predicate which describes the property of the entity in question is stative or eventive, quantifiers are freely interchangeable with frequency adverbs. However, in English, the situation in different. The frequency
adverb is syntactically adjacent to the main predicates *have blue eyes* and *eat octopus*. In *Cats* *often* *have blue eyes*, which is a stative predication, *often* gets an atemporal reading, quantifying the *cats who have blue eyes*. On the other hand, *often* can get a temporal reading adjacent to the event predicate *eat octopus*, quantifying the occasions of “eating octopus”. The reason it is possible to have these different interpretations of the frequency adverb in English is because of the skewing between the semantic configuration and the syntactic configuration of existential sentences in English, i.e. although semantically *often* quantifies entities such as *cats who have blue eyes*, syntactically it quantifies the predicate *have blue eyes*. It seems that when the predication is an event, this skewing in English interferes with the existential reading of predicates in cases such as *Australians often eat octopus*.

It is interesting to note, however, that if the nature of the event implies that it only happens once, *often* can be used existentially without giving an interpretation of repeated action, such as in the case of the verb *drown*:

(30) *A lot of people* *drown in the rivers around here.*

(31) *People* *often* *drown in the rivers around here.*

Furthermore, if a stative predicate denotes a less permanent state than “having blue eyes”, such as “liking”, “believing” or “wanting”, it can yield both interpretations. In order to illustrate this point, I will recite the Japanese translation (20), in which the frequency adverb *yoku* is used, with its original English sentence (32), in which a spatially-oriented quantity expression *a lot of* is used:
(20) Taihoo ya nanika-o sagasu teme-ni, cannonball or something-ACC look for sake-LOC kono atari-no kawa-ni moguru hito-ga yoku this area-GEN river-DAT dive person-NOM often iru. exist. (si)
‘Lit.: People who dive into the river around here to look for cannonballs or something often exist.’

(32) A lot of people like to look in the rivers around here for cannonballs and things. (CD)

The main predicate in (32) is like, which is a stative predicate. Can the meaning be expressed by the frequency adverb often in English?

(33) People often like to look in the rivers around here for cannonballs and things.

Although like is a stative predicate, in this case we have two interpretations just as in the case of “eating octopus”. Compared to stative predicates such as “having blue eyes” and “having a short tail” which denote a permanent attribute of an entity, “liking to do something” can only denote a temporary state. Thus, when the stative predicate is interpreted as denoting a temporary state, an interpretation of repeated occurrence arises just as in the case of non-stative predicates.

In Section 5, we have pointed out that both languages express existential meaning with frequency adverbs and attributed this to the common semantic grounds which allow such interchangeability. We have also shown that the structures in which frequency adverbs are used
Chapter 6

differ between the two languages and attributed this to the fact that the underlying semantic configuration of existential meaning is skewed in the surface representation in English.

6. **Merging of a quantitative value and the notion of existence**

Let us briefly note that some predicatively placed adjectives in Japanese express existential sentences with marked quantity.

Such typical adjectives are *ooi* 'many, much' and *sukunai* 'few, little':

(34) *le-no roon-no hensai nado de*  
house-GEN mortgage-GEN repayment etc because  
*paato-ni dete-iru shufu mo ooi.* (I)  
part-time work-LOC going-is housewife also (it is) many  
'Lit.: Housewives who go out and get a part-time job to repay the mortgage, etc are many.'  
'Many housewives go out and get a part-time job to help repay the mortgage, etc.'

(35) *Zaseki-ga nanahyakugoujuu ijoo aru yoo-na*  
seat-NOM seven hundred and fifty over exist like  
*koodoo-wa sukunai.* (I)  
assembly hall-TOP (it is) few  
'Lit.: Assembly halls which would have more than 750 seats are few.'  
'Few assembly halls would have more than 750 seats.'

Both *ooi* and *sukunai* can be replaced by an existential verb and a quantifier with marked quantity:
The pairs basically convey the same meaning. *Ooi* and *sukunai* are cases of class-shift where two separate semantic units, a notion of quantity and an existential meaning, are merged into a single lexeme.

Although at first glance the notion of quantity and existential meaning is opaque, an adjective such as *mezurashii* ‘rare’ also expresses an existential message with marked quantity:

(36) *Supinoza-no yoo-ni shisoo-no tame-ni*  
Spinoza-GEN like philosophy-EN sake-LOC

t Kerry severely criticise-PASS-and persecute-PASS-and did hito mo *mezurashii*. (ss)

person also rare

‘Lit.: People who were criticised for their ideas and persecuted as severely as Spinoza are rare.’

*Mezurashii* can also be rephrased with *hotondo nai* ‘does not exist in a large number’.
It is only when we think of the meaning of *mezurashii* ‘rare’ in (36) as a case of conveying existential meaning with marked quantity that we understand why it semantically corresponds with the English translation, which is a typical existential sentence with a marked quantity *few*:

\[
(11) \textit{Few philosophers in more recent times have been so blasphemed and so persecuted for their ideas as this man.} \quad (sw)
\]

The examination of how the existential message is conveyed in both languages in this chapter enables us now to explain the semantic equivalence underlying such opaque formal correspondence between sentences such as (36) in Japanese and (11) in English.

7. **Summary**

In Section 2, 3 and 4, we examined the complex skewing when conveying existential meaning in the two languages, which involves class-shift as well as rank-shift. We have pointed out that what is expressed in existential sentences by a quantity expression in a noun phrase in English class-shifts into two elements in Japanese, both of which are outside the noun phrase, i.e. an NP-externally placed quantity expression and an existential verb. Furthermore, what is expressed by a main predicate in English is rank-shifted to a relative clause in Japanese. We have found
that the Japanese structure is more congruent with the semantic configuration of existential meaning compared to English.

In Section 5 we showed that in both languages frequency adverbs can also carry existential meaning, involving class-shift in the case of English but not in Japanese. We have attributed such a common phenomenon firstly to the general observation that equivalence of quantitative value can be expressed in different word classes, and secondly to the semantics of existential sentences bearing temporal orientation, which quantify entities encountered over time. In connection with the use of frequency adverbs in existential sentences, we have noted that in English quantity expressions can shift to frequency adverbs only when the main predication is stative which describes a permanent state. We attributed this restriction to the fact that the underlying semantic configuration of existential meaning is skewed in the surface representation in English.

In Section 6, we briefly showed that in Japanese some predicatively used adjectives denote the notion of existence and marked quantity, and that an existential message is often conveyed by such expressions.

Based on the findings in this chapter, in Chapter 7 we will proceed to examine how the existence of "situations" is expressed in both languages. Parallel patterns to those found in this chapter will emerge.
Chapter 7

Quantification of Situations in the Existential Sentence

1. Introduction

Not only entities, but also situations can be construed existentially. This chapter will argue that the Pred-Nonpast koto ga aru construction and Pred-Past koto ga aru construction in Japanese are instances where such construal is expressed syntactically by an existential construction. These constructions can be literally translated as “There exists at least one occasion when a certain situation takes place” and “There exists at least one occasion on which a certain situation took place in the past”, respectively. We will point out that the semantics of these constructions roughly correspond to the habitual and experiential perfect in English, and that they both present instances of major skewing. Further, we will argue that the indefiniteness associated with the existential sentence transfers into these constructions, and that this phenomenon in turn serves as syntactic evidence in support of the generally accepted view that situations described in the habitual and the experiential perfect are indefinite.

In Section 2 we will review the tense and aspectual characteristics of the English habitual and experiential perfect. In Section 3 we will examine the literature which mentions the two Japanese constructions in question. In Section 4 we will argue that the common semantics of these Japanese constructions are the existential construal of situations and point out that they are instances of grammaticalisation of primarily spatial expressions. In Sections 5 and 6 we will examine actual examples
and present them as instances of major skewing. We will also point out that indefiniteness is clearly deducible from these Japanese constructions as they are existential constructions.

2. Tense and aspectual characteristics of the English habitual and experiential perfect

The purpose of this section is to review the tense and aspectual characteristics of the habitual and experiential perfect in English and to point out a common semantic characteristic: situations described in these constructions are indefinite.

2.1 The habitual

As we discussed in Section 4.2 of Chapter 2, the aspectual characteristic of the habitual is complex. It concerns both perfective and imperfective. Comrie (1976: 29-30) remarks that it views a situation as indefinite protraction, and when a situation cannot be protracted indefinitely, the habitual involves iterativity. Thus, a sentence such as *He often eats out* describes an extended period of time, in which “eating out” occurs repeatedly, with close intervals.

Regarding the tense of the habitual, although it is often used with the present tense, the interpretation of this tense is different from usual. The present tense of the habitual does not necessarily refer to the moment when the situation actually occurs, but rather to the moment at which the characteristic of the (indefinitely protracted) situation holds: “Sentences with habitual aspectual meaning refer not to a sequence of situations recurring at intervals, but rather to a habit, a characteristic situation that holds at all times” (Comrie 1976: 39). Frawley (1992: 316) notes that the habitual does not specifically relate the situation to time, but extends the situation over time. As mentioned in Section 2 of
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Chapter 3, Givón (1993: 218) points out the non-specific characteristic of the habitual. He argues that the habitual is one of the grammatical environments which readily permits a non-specific reading of an indefinite noun, as in *John meets a woman at a pub*. He relates this characteristic of the habitual to the common characteristic of irrealis moods: “None of these modes depicts the occurrence of a particular event at a particular time”.

This atemporal characteristic of the habitual is often compared to the present tense used in generic assertions to express truths that hold all the time, such as *Cows eat grass*. For example, Frawley (1992: 316) states: “expressions in the habitual aspect are quite similar to generic statements. ... The habitual ... may be interpreted very much like a generic aspect, some kind of the extension of an event into customary or usual practice, and removal from temporal contingency”\(^1\).

In sum, from an aspectual point of view the habitual describes a pattern of situations distributed over time but not in terms of temporal sequence. The present tense in which the habitual is often expressed refers to the present moment only in terms of whether such a pattern of protraction holds true at the time of utterance and not whether the situation is occurring at the present moment. In this sense, the tense of the habitual may be described as atemporal. Thus, situations described in the habitual are removed from temporal anchoring, i.e. they are atemporally indefinite.

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\(^1\) Dahl (1985: 97) distinguishes the habitual from the habitual generic statement which is “lawlike”, such as *He writes letters* as a response to a question *What kind of work does your brother do at work?* Dahl argues that the habitual, on the other hand, lacks “lawlikeness”. He remarks that the typical habitual sentence is a structure which can occur with the adverb *usually*. See also Comrie (1976: 40).
2.2 Experiential perfect

In order to examine the semantics of the experiential perfect, we need to first discuss the tense and aspectual characteristics of the English perfect. The perfect is different from other aspects in that it does not concern the internal structure of a situation. It expresses "the continuing present relevance of a past situation" (Comrie, 1976: 52), by relating two points of time; the time when a situation occurs and the time of the state resulting from this situation. This complex two-point frame then bears a relation to the utterance time. The present perfect, under which the experiential perfect is generally subcategorised in English, denotes a situation when the point of time which expresses the time of the state coincides with the utterance (present) time. As we will discuss later, the Pred-Past koto ga aru construction also expresses these dual time points by a combination of present and past tense.

Situations referred to by the present perfect in English are typically understood to have occurred at an indefinite point of time in the past. The indefinite reference of the present perfect is often mentioned in contrast to the definite (specific) reference of the simple past. As was discussed, the simple past tense such as John's uncle died has, even implicitly, specific reference. Kelly (1947) uses the terms "definite past time" to refer to the simple past and "indefinite past time" to refer to the perfect construction. Allen (1966: 152-8) thoroughly discusses the parallel between the definite vs. indefinite opposition and the simple past vs. the present perfect. He uses the terms "identified-time" in contrast to "non-identified-time":

It appears ... that the opposition between past verb forms and the so-called present perfect verb forms is primarily one of "identified
time"/"non-identified time ". Both kinds of forms refer to time(s) in the past. (Allen 1966: 157)

This semantic difference in English between the simple past and present perfect is reflected by the presence or absence of time words which refer to a particular point of time. Comrie (1985) notes:

"English has a rule preventing occurrence of the perfect with a time adverbial referring to a specific time point in the past, so that if we want to locate John’s breaking his leg in time by means of such a time adverbial, then the simple past must be used." (Comrie 1985: 54)

This holds true regardless of whether the event happened five minutes ago or six weeks ago. However, as Comrie (1976: 54-6) also notes, specific time words can occur in the English present perfect in certain situations such as I have recently learned that Bill is leaving. It is also observed that in other languages time words can occur in the present perfect construction (see Comrie 1985: 32-5; Dahl 1985: 137).

Leech (1969) compares the difference between the simple past and the present perfect with the explicit opposition between a definite noun phrase and an indefinite noun phrase in English:

The difference between ‘I saw him’ and ‘I have seen him’ is therefore parallel to that between the man and a man. (Leech 1969: 145)

As mentioned earlier, the focus of the present perfect is to denote the relevance of the past event to the present moment. Thus, when it happened is not a primary concern.

The experiential perfect is generally treated as one of the four subcategories of the present perfect in English. Below are Comrie’s (1976: 56-61) terms and definitions of the four interpretations of the present
perfect: (a) "perfect of result" which indicates that a present state is the result of some past situation, as in *John has arrived*; (b) "experiential perfect" which indicates that "a given situation has held at least once during some time in the past leading up to the present", as in *Bill has been to America*; (c) "perfect of persistent situation", which describes "a situation that started in the past but continues (persists) into the present" as in *We’ve lived here for ten years*; and (d) "perfect of recent past", which indicates the closeness of the past situation to the present moment, as in *Bill has just arrived*. Comrie (1985) emphasises that the inherent meaning of the perfect is the present relevance of the past event, and argues that the often held idea that the perfect relates to recent past is only an implicature:

“There is often an implicature derivable from the perfect that this grammatical form has more recent time reference than other past tenses, although this is not part of the meaning of the perfect but rather derivable as an implicature from the meaning of present relevance of a past situation.” (Comrie 1985: 84)

Frawley (1992: 350) supports Comrie’s view and remarks that the four interpretations of the present perfect in English are “consistent with the perfect, but not required by it. As implicatures, they are determined by the context of use, and are not inherent to the forms”.

Although English does not make a grammatical distinction between the experiential perfect and other present perfects\(^2\), it has been

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\(^2\) Comrie (1976: 59) states that although English does not make a distinction between the experiential perfect and the perfect of result, such a distinction is made by *be* and *go* in sentences like *Bill has been to America* (experiential) and *Bill has gone to America* (result)
found that some other languages have an independent category which expresses the semantics of the experiential perfect\textsuperscript{3}, even if in some cases it is peripheral (see Dahl 1985: 139-44). Dahl defines the semantics of the experiential perfect as “an event of a certain type which took place at least once during a certain period up to a certain point in time” (141). McCawley (1971: 104) mentions that the experiential perfect, which he calls “existential perfect”, has the same semantic configuration as an existential sentence, indicating “existence of past events”. He contrasts the meaning of the “existential” case (Comrie’s “experiential perfect”) and “universal” case (Comrie’s “perfect of persistent situation”), and remarks that many languages do not encode them in the same structure. Not only does English not have a distinct category to express this contrast, it has other means to express the experiential perfect meaning:

“Even in languages like English where the perfect carries these additional interpretations, it is possible to evoke the meaning without the perfect: Well, Einstein DID teach at Princeton, for your information”.

(Frawley 1992: 316)

McCawley’s view of the experiential perfect as having an existential meaning indicates why it can be expressed in this way in English, i.e. DID emphasises the existence in contrast to the non-existence of such a situation in the past. Further, as the emphasis is on existence of a situation, the particular time at which it occurred is not relevant, in spite of the fact that it is expressed in the simple past tense in this sentence.

\textsuperscript{3} Comrie makes reference to languages in which a systematic distinction is made between the two perfect meanings, such as Mandarin Chinese discussed by Chao (1968: 251-2) and Kpell examined by Welmers (1973: 351-2). Frawley (1992: 350) refers to Indonesian as a language which expresses such a distinction.
In particular reference to experiential perfect sentences, Leech (1969: 144) points out that what is encoded in the perfect is indefinite not only in terms of the point of time at which a situation occurred but also in terms of the number of times a situation occurred:

"The perfect, used in sentences like I have been to the Scottish Highlands, is indefinite both in the sense of indicating no particular time, and in the sense of indicating no specific number of situations. It is 'countable', but is unmarked for number (although number may be indicated ad-[sic]verbially, as in I've only once been to the Scottish Highlands)."

(Leech 1969: 144)

What Leech describes as “unmarked for number” corresponds well to the basic existential meaning of “existence of at least one situation”.

In sum, the experiential perfect refers to a situation which occurred more than once at an indefinite time in the past and which bears some relevance to the present moment. The meaning of experiential perfect is generally treated as one of the interpretations of the present perfect in English. This meaning can be distinguished from other perfect interpretations and can be expressed by a discrete grammatical structure.

In this section, we have examined the characteristics of the habitual and the experiential perfect in terms of tense and aspect. We have shown that situations referred to by both are indefinite; those in the habitual are atemporally indefinite and those in the experiential perfect temporally indefinite.

3. Previous treatments of the Pred-Past koto ga aru construction and Pred-Nonpast koto ga aru construction

Let us start by giving examples of the Pred-Nonpast koto ga aru construction and the Pred-Past koto ga aru construction:
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Pred-Nonpast koto ga aru construction

(1) Soto-de tabe-ru koto-ga aru.
outside-LOC eat-Nonpast NMLZ-NOM exist
'I sometimes [DO] eat out.'

Pred-Past koto ga aru construction

(2) Nihon-e it-ta koto-ga aru.
Japan-LOC go-PAST NMLZ-NOM exist
'I have been to Japan.'

Syntactically, both (1) and (2) are basic existential sentences in which the subject position is filled by a nominalised clause ending in the nominaliser koto, describing a situation. The difference between the two is the tense of the nominalised clause: non-past and past. The difference between the examples above and the generic existential sentences we observed in Chapter 6 is that the subject here expresses a situation and not an entity. Note also that the existential verb is aru (and not iru), which denotes the existence of inanimate objects.

Because of the syntactic similarities and the nominalisation involved, the two constructions sometimes receive mention at the same time. For example, Martin (1975: 846-9) treats both constructions under one subcategory of nominalisation by koto, regardless of the tense of the nominalised clause. He interprets the meaning of koto in these constructions as "experience", and calls these constructions "nominalized experientials":

"An adnominalized sentence + koto ga aru means 'it sometimes happens that S' or 'there exists the experience that S'," (Martin 1975: 846)
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Martin notes that these constructions can be questioned:

(3) Soto-de tabe-ru koto-ga arimasu-ka
outside-LOC eat-Nonpast NMLZ-NOM exist-Q
'Do you (ever) eat out?'

(4) Nihon-e it-ta koto-ga arimasu-ka
Japan-LOC go-Past NMLZ-NOM exist-Q
'Have you (ever) been to Japan?'

or negated:

(5) Soto-de tabe-ru koto-wa nai
outside-LOC eat-Nonpast NMLZ-TOP exist-NEG
'I don’t eat out.'

(6) Nihon-e it-ta koto-wa nai
Japan-LOC go-Past NMLZ-TOP exist-NEG
'I have never been to Japan.'

and that the main predicate aru can be in the past tense as well:

(7) Soto-de tabe-ru koto-ga at-ta
outside-LOC eat-Nonpast NMLZ-NOM exist-PAST
'I used to eat out.'

(8) Nihon-e it-ta koto-ga at-ta.
Japan-LOC go-PAST NMLZ-NOM exist-PAST
'I had been to Japan.'
Alfonso (1974: 1036-8) also draws attention to the common characteristics of these constructions:

"KOTO makes the verb into a noun, and ARIMASU indicates that some activity takes place." (Alfonso 1974: 1037)

However, these constructions are often mentioned separately in textbooks. The Pred-Past koto ga aru construction gets much more frequent mention as a grammatical structure to be learned by students. Textbooks and language reference materials agree that the Pred-Past koto ga aru construction roughly equates with the English experiential perfect. For example, Alfonso (1974: 1036-8), while giving the literal meaning of this construction as "there were, there have been times", remarks that this construction roughly equates with English "have (ever)" in its use of referring to past experiences. Makino and Tsutsui (1984: 196-7) mention that this structure "expresses one's experience" and notes that the same idea is often expressed by the English experiential perfect.

In the linguistic literature, McCawley (1971: 105) notes that Japanese uses the existential Pred-Past koto ga aru construction to express the experiential perfect. Inoue (1985 cited in Dahl 1985: 141-2) points out the dual tense characteristics of this construction: "it is implied that the activity, event or state obtained at one or more points in a stretch of time extending from the past to the present'.

Unlike the Pred-Past koto ga aru construction, the Pred-Nonpast koto ga aru construction is not generally equated to any particular English construction. Martin (1975) notes that it is hard to translate into English: "the resulting sentences require some special tricks of translation" such as we sometimes [DO] call and we have (on occasion) called. Nagara (1990: 319) explains the meaning of this construction as "indicating possibility or tendency". Other suggested expressions include: "there are times when
..." or "something happens sometimes" or "from time to time" (Alfonso 1974: 1037); "there are times when ..." and "something happens from time to time" (Makino & Tsutsui 1986: 198-9); and "sometimes such is the case" (Nagara, 1990: 319). What is also commonly mentioned as a characteristic of the Pred-Nonpast koto ga aru construction is that it can appear with frequency adverbs such as yoku ‘often’ or toki-ni-wa ‘at times’ (see Alfonso 1974: 1037; Martin 1975: 848). Furthermore, it is pointed out that koto in the Pred-Nonpast koto ga aru construction is interchangeable with nouns such as toki ‘time’ and baai ‘occasion’. Martin (1975: 848) suggests using this as a technique for translation.

Explanations of these two structures have been limited to textbooks and reference materials and, in spite of their syntactic similarities, they have not received much investigation in the linguistic literature in terms of any assumed common semantic properties. In Section 4 below, I propose to examine the meanings of the two constructions as they relate to existential situations.

4. Semantic characteristic of koto ga aru construction

In much the same way as entities are expressed ontologically, as seen in Chapter 6, situations such as "I eat apples" can also be construed existentially, as a category. Parker-Rhodes (1978) states:

"With predications, such as "I eat apples", they refer to the class of possible situations designated by the predication. We thus have "I don't always eat apples", "I never eat apples", "I only sometimes eat apples", etc.; though expressed in terms primarily referring to time in English, these sentences are really modifications of the unmarked form concerned with the class of situations to which the predication refers." (Parker-Rhodes 1978: 193)
The above observation is in accord with McCawley’s (1971:105) view that the *Pred-Past koto ga aru* construction is a case of an existential message, indicating “existence of past events”. However, not only the *Pred-Past koto ga aru* construction, but also the *Pred-Nonpast koto ga aru* construction can be viewed as a case where situations are expressed existentially. The common meaning between the two constructions can be described as “there exists at least one situation (as a category)”. Thus, returning to the earlier examples (1) and (2), (examples are repeated below):

**Pred-Nonpast koto ga aru** construction

(1) *Soto-de tabe-ru koto-ga aru.*

outside-LOC eat-Nonpast NMLZ-NOM exist

’I sometimes [DO] eat out.’

**Pred-Past koto ga aru** construction

(2) *Nihon-e itta koto-ga aru.*

Japan-LOC go-Past NMLZ-NOM exist

’I have been to Japan.’

the situation of “eating out” in (1) and “going to Japan” in (2) are existentially construed as categories of a situation which does or did occur. The two constructions are different in the tense of the nominalised clause, i.e. nonpast and past. Thus, the meaning of each construction can be compared as a minimal pair: “there exists at least one situation in which *I eat out***” and “there exists at least one situation in which *I went to Japan***” respectively. Just as in existential sentences relating to entities, the discourse particle *mo* ‘also/in addition’ often
occurs in this construction; in this case meaning "in addition to other categories of situation, this category of situation also exists":

(9) Soto-de tabe-ru koto mo aru.
outside-LOC eat-Nonpast NMLZ also exist
'I sometimes do eat out.'

(10) Nihon-e it-ta koto mo aru.
Japan-LOC go-Past NMLZ also exist
'I have been to Japan.'

The metaphoric use of the existential construction to describe temporal notions in Japanese can be understood according to the localist hypothesis that "spatial expressions are more basic, grammatically and semantically, than various kinds of non-spatial expressions" (Lyons 1977: 718). Miller and Johnson-Laird (1976: 374ff) remark that the primacy of spatial notions is noted frequently, and give the following quote from Urban (1936: 186):

"Our intellect is primarily fitted to deal with space and moves most easily in this medium. Thus language itself becomes spatialized, and in so far as reality is represented by language, reality tends to be spatialized."


Referring to spatialisation of time, Lyons (1995) states that such a metaphoric process entails two universally pervasive linguistic phenomena: (a) languages develop lexemes and grammatical structures to refer to non-spatial concepts (such as events, states and qualities) as entities, and (b) many languages use spatial vocabulary and grammar as structural templates for denoting temporal concepts:
"[T]emporal expressions are intrinsically more abstract than spatial expressions and ... the modelling of temporal reference and denotation on spatial reference and denotation is part of the more general process of modelling the abstract upon the concrete." (Lyons 1995: 326)

The most frequently mentioned phenomenon is the use of locative expressions to encode aspectual notions of progressivity and stativity (see Anderson 1973; Heine, Claudi & Hünnemeyer 1991: 113-8; Comrie 1976: 98-106; Lyons 1977: 719).

Both the Pred-Nonpast koto ga aru construction and the Pred-Past koto ga aru construction reflect these phenomena in that an existential construction, which is primarily used to denote the existence of entities, is grammaticalised and used as a template for expressing the existence of situations.

The common characteristic between the two constructions, therefore, is that both are instances where situations are existentially expressed. Below we will investigate the characteristics of each construction separately and take up the issue of skewing.

5 Pred-Nonpast koto ga aru construction

We showed in Chapter 6 that there is a major skewing between the sentence structures in which existential meaning is expressed in English and Japanese. Let us take the following examples which illustrate such skewing:

(11) Me-ga aoi neko mo iru
    eye-NOM blue cat also exist
    'Lit.: Cats who have blue eyes also exist.'

(12) Some cats have blue eyes.

(13) Sometimes cats have blue eyes.
In Japanese, entities are expressed in a noun phrase accompanied by a relative clause which describes the properties of such entities, and the existential meaning is expressed by the existential verb *iru*. In English the entities form a subject and the properties of the entity are expressed by the main predicate. Furthermore, the neutral size of a category 'at least one' is expressed by *some* or *sometimes* in English but is not explicitly expressed by a quantifier in Japanese.

The same skewing occurs when existence of situations is conveyed in the two languages. In Japanese, the basic existential meaning for situations is expressed by the existential construction *Pred-Nonpast koto ga aru*. In English such existential meaning is not as explicitly represented. Leech (1969: 141) remarks that an existential meaning of situations in English can be conveyed either with or without *sometimes*, as in *He scores goals* and *He sometimes scores goals*, in which *sometimes* expresses the opposite of nil occurrence, thus existence of a situation. Martin’s comment that the basic *Pred-Nonpast koto ga aru* construction is hard to translate into English must come from the fact that there is no explicit expression in English to convey the existential message for situations. Martin, however, suggests the insertion of *do* and *sometimes* as in *We (sometimes) do call*. This attempt to translate the existential meaning by the auxiliary verb *do* exactly parallels Frawley’s remark that the meaning of the experiential perfect can be expressed by a simple past in English with the insertion of the auxiliary verb *did*, as in *Einstein DID teach at Princeton*. In both cases the insertion of *do* emphasises that “something happens” or “something happened” in contrast to “something does not happen” and “something did not happen”.

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The following pair of attested examples show how the existential message expressed by *sometimes* in English is expressed by the basic *Pred-Nonpast koto ga aru* construction in the Japanese translation:

(14a) *Sono shu-no koto-o motto shiri-tai toi u* 
that type-GEN thing-ACC more know-want QUO
kimochi-ni naru koto-ga aru wa. (sk)
feeling become NMLZ-NOM exist SP
‘Lit.: There exist occasions when I feel like wanting to know
more about that type of thing.’

(14b) *Sometimes when one is touched by tragedy he becomes its student.* (FPF)

In the following pair of examples, the *possibility* of a situation occurring
is expressed by the auxiliary verb *can* in English, and expressed by the
*Pred-Nonpast koto ga aru* construction in Japanese.

(15a) *Daibingu-no badii to onaji de, [tsuushin diving GEN buddy with same COP communication*
soochi-ni ] inochi-o sukuw-areru koto
equipment-DAT life-ACC save-PASS NMLZ
*mo aru. (si*
also exist
‘Lit.: In the same way as with a dive buddy, there also exist
occasions where one’s life is saved [by communication
equipment].’

(15b) *Like your dive buddy it can save your life.* (CD)
This use of *can* in English relates to Nagara's (1990: 319) interpretation of the meaning of the Pred-Nonpast *koto ga aru* construction as indicating "possibility".

The semantic configuration expressed in the existential sentence structure in Japanese can also be expressed in English, as in *There are times when ...*, or *There are occasions when ...*, and we need to investigate the actual pattern of the use of these structures in comparison to the alternative pattern involving *sometimes*. However, the Pred-Nonpast *koto ga aru* construction occurs in Japanese with great frequency irrespective of whether the text is oral or written.

Although the Pred-Nonpast *koto ga aru* construction can express the basic existential meaning without *tokidoki* 'sometimes', the latter can appear in this construction as was the case with entities. As mentioned in Section 3, the Pred-Nonpast *koto ga aru* construction occurs with frequency adverbs. Martin (1975) mentions that "to bring out the meaning *sometimes* you can start off with *tokidoki* 'sometimes' or *tama ni wa* 'on occasion, every now and then' or synonymous phrases" (848). This is indeed the case, as we see in the attested examples below:

(16a) *Nazeka hidoku tsukarete-ita. Sonna fuu-ni somehow extremely tired-was. like that way
naru koto-ga tokidoki aru. (sk)
become NMLZ -NOM sometimes exist
‘Lit.: Somehow I was extremely tired. There exist occasions sometimes when I feel that way.’*

(16b) *I was tired beyond explanation, as I sometimes got. (FPF)*

(17a) *Koko-ni han-nichi i-temo atashi-wa here-LOC half day exist-even if I-TOP*
marude shir-anait-te koto mo tokidoki aru
as if know-NEG-QUO NMLZ also sometimes exist
kara ne. (sk)
because SP

‘Lit.: There exist occasions sometimes when they are here for half a day and I completely do not know [that others are here too].’

(17b) Sometimes they’re here half a day and I don’t know. (FPF)

Just like the generic existential sentence for entities, the Pred-Nonpast koto ga aru construction also occurs with frequency adverbs with marked quantity:

(18) Shibashiba dekakeru koto-wa nak-atta
often go out NMLZ-TOP exist-NEG-PAST
deshoo ka. (H)
COP Q

‘Wouldn’t it be that occasions often existed when she went out?’

(19) Hito-o obore-sasete korosu koto-wa
person-ACC drown-CAUSE kill NMLZ-TOP
mettani nai. (si)
seldom exist-NEG

‘Seldom do occasions exist where one kills a person by drowning him.’

Its co-occurrence with frequency adverbs suggests that the Pred-Nonpast koto ga aru construction shares a similar meaning to the
habitual in English. Frequency of a situation can be expressed in Japanese either by a main predicate and a frequency adverb or by the \textit{Pred-Nonpast koto ga aru} construction:

\begin{align*}
(20) & \text{Yoku soto-de taberu.} \\
& \text{often outside-LOC eat} \\
& \text{‘Often I eat out.’}
\end{align*}

\begin{align*}
(21) & \text{Soto-de taberu koto-ga yoku aru.} \\
& \text{outside-LOC eat NMLZ-NOM often exist} \\
& \text{‘Occasions often exist when I eat out.’}
\end{align*}

A structure such as (20) corresponds directly to an English habitual sentence since one element of one language is expressed in the other by the corresponding element. In this case there is no skewing between the two languages. Skewing occurs when the situation is expressed existentially in Japanese. Again one may say that English can also use expressions such as \textit{Often there are times when ...}, which syntactically corresponds to the \textit{Pred-Nonpast koto ga aru} construction. However, unlike English, this Japanese construction is very frequently used, co-occurring with frequency adverbs.

Let us now point out the semantic properties shared by the habitual and the \textit{Pred-Nonpast koto ga aru} construction. We have indicated that the habitual describes a pattern of situations distributed over time with no reference to a particular time, similar to the meaning of a generic statement. In this sense we have suggested that the tense of the habitual may be described as atemporal. This atemporal characteristic of the habitual corresponds to a generic existential message. Therefore, there is a semantic link between what can be described with an existential
sentence *He does score goals* and a habitual sentence *He often scores goals*. In the former, the frequency of the habit is not overtly expressed and is thus interpreted as existential. The *Pred-Nonpast koto ga aru* construction expresses both the existential and habitual interpretations of English sentences, one with neutral size of quantity and the other with marked quantity. Thus, although there is no grammatical marking of the indefiniteness of situations described in habitual sentences in English, the atemporal indefiniteness of the situations is clearly deducible from the existential construction *Pred-Nonpast koto ga aru* in Japanese.

Whether habituality is expressed existentially or not depends on the context. It is when one kind of situation is contrasted with others that the *Pred-Nonpast koto ga aru* is preferred. This is evident in the example below, in which different categories of situations in which promotional activity is carried out are contrasted:

\[(22a) \text{Kookaidoo-o} \quad \text{karite-oite senden-suru koto mo}\]
\[
\text{public hall-ACC rent-place advertise-do NMLZ also}
\]
\[
\text{aru shi, kookoo-no} \quad \text{koochoo-ni hanashi-o}
\]
\[
\text{exist and high school-GEN principal-DAT story-ACC}
\]
\[
\text{mochikakeru koto mo aru n desu. (NE)}
\]
\[
\text{suggest NMLZ also exist NMLZ COP}
\]
\[
\text{‘Lit.: Occasions exist when I rent a public hall and advertise while other occasions exist when I speak to principals of high schools.’}
\]

\[(22b) \text{Sometimes I rent a hall and advertise, sometimes I speak to the principal of the high school. (ne)}\]

It is worth noting that in the same way that *ooi* ‘many/much’ and *sukunai* ‘not many, not much’ and adjectives such as *mezurashii* ‘rare’
appear predicatively in existential sentences referring to entities, they also appear in the *Pred-Nonpast koto ga* construction to express the quantity of temporal concepts. For example, the following sentences come from a passage in *Utsukushisa to Kanashimi to* where the main character Oki’s routine and habits as a writer are described. Some are described with *ooi* and others with *sukunai*:

(23a) *Sono mama ichi-jikan ka ichi-jikan han bakari*  
that as it is one-hour or one-hour half about  
nemutte-shimau koto-ga *ooi*. (UK)  
sleeping-end up NMLZ-NOM many  
‘Lit.: Occasions are many when I fall asleep for an hour or one hour and a half there.’

(23b) *In the afternoon he would often fall asleep there for an hour or two.* (bs)

(24a) *Hiruma-no shigoto-ni-wa yakan-no*  
day time-GEN work-DAT-TOP night time-GEN  
shigoto-no yoo-ni, tsukare-ni tsukarete kaette  
work-GEN like tired-LOC tired on the contrary  
amakakeru to demo in koto-ga *sukunai*  
fly in heaven QUO even say NMLZ-NOM not many  
no da. (UK)  
NMLZ COP  
‘Lit.: Occasions are not many when his imagination runs wild when he works during the day just like it does when he works at night time until he gets extremely tired.’

(24b) *Only rarely did he feel, as he used to when he worked at night, that fatigue stimulated his imagination.* (bs)
Others are described predicatively by adjectives which carry frequentative meaning:

(25a) Kakimono-no yukizumari-ni atarashii michi-ga
writing-GEN standstill-LOC new way-NOM
mie-dasu koto mo mare de wa nai no da. (UK)
see-begin NMLZ also rare COP TOP NEG NMLZ COP
‘Lit.: Occasions are not rare when he begins to see a new
pathway at the dead-end of his writing process.’

(25b) Not infrequently he could find a new pathway through the
difficulties that had brought his writing to a standstill. (bs)

(26a)Yoru-no shigoto-no aida-wa nemuri-ga asakute,
night-GEN work-GEN period-TOP sleep-NOM shallow and
shigoto-ni kakawaru yume-o mitari suru no4 -
work-LOC concern dream-ACC seeing do NMLZ-
ga tsune-na no ni, (UK)
NOM usual NMLZ though
‘Lit.: It is always the case that he dreams about his work as the
sleep is light when he works at night time, though.

(26b)While he was writing a novel he tended to sleep poorly at
night and to dream about his work, (bs)

Note that the nominaliser no is used instead of koto in this example. Although koto
can be used instead, no sounds much more natural here. In examples 23, 24 and 25, however,
koto seems to be the only option. This use of no may be forced by the idiomatic expression
-no ga tsune da ‘It’s always the case that...’.
We can look at these examples as an extension of the *Pred-Nonpast koto ga* construction in the same way as we viewed existential sentences with such adjectives in the predicative position as an extension of the existential sentence.

We have shown that the *Pred-Nonpast koto ga aru* construction parallels the existential construction for entities in many ways. As with the existential sentence for entities, there is skewing between the *Pred-Nonpast koto ga aru* construction and its semantic equivalents in English. In the *Pred-Nonpast koto ga aru* construction, the situation is rankshifted to a subordinate clause, where in English the situation is expressed by the main predicate. We need to investigate further to see how frequently English expressions such as *There are times when...* are used, compared to its syntactic counterpart in Japanese, the *Pred-Nonpast koto ga aru* construction.

6. *Pred-Past koto ga aru* construction

As is mentioned in textbooks, and as can be seen from attested examples, the *Pred-Past koto ga aru* construction without any quantity expression finds the experiential perfect construction in English as its rough equivalent. However, it is a case of major skewing:

(27a) *[Sesshoku shoogai-de] shinda hito-o mita koto
    eating disorder-with died person-ACC saw NMLZ
    aru wa (si)
    exist SP
    ‘Lit.: There exists [at least one] experience in which I saw
    people who died from eating disorders.’

(27b) *I’ve seen their victims.* (CD)
In this construction the nominalised noun phrase refers to a situation which took place in the past. Note that the main predicate, *aru*, may also occur in the past tense, in which case the construction corresponds to English past perfect construction.

This construction can also be seen as providing syntactic evidence for the generally accepted semantic characteristics of the experiential perfect. Firstly, it explicitly represents the dual time points, and secondly the indefiniteness of the situations is readily deducible from the semantics of the construction. Comrie (1976: 106-8) remarks that in some languages the past and non-past form are combined to express what English expresses as the present perfect:

“In looking at ways of expressing the Perfect in various languages, we shall be particularly interested in ways that languages use of giving overt expression to both the idea of past situation and the idea of present state, i.e. of combining the two characteristics of the meaning of the prefect in one means of expression.” (Comrie 1976: 106)

The *Pred-Past koto ga aru* construction incorporates two tenses, the past of the nominalised clause and the non-past of the main verb *aru*. This explicitly indicates the connection between the two time points. The other characteristic of the experiential perfect, that it expresses...
indefiniteness of situation in terms of an indefinite point of time and an indefinite number of times, is readily deducible from the *Pred-Past koto ga aru* construction as it is an existential construction. Therefore, Leech’s (1967: 145) claim that an indefinite noun phrase such as *a man* corresponds to the present perfect such as *I have seen him* is evident in the *Pred-Nonpast koto ga aru* construction in Japanese since the existential structure itself entails the indefinite reading of the noun phrase which describes the situation.

Next, we will show how the *Pred-Past koto ga aru* construction and the *Pred-Nonpast koto ga aru* construction differ in the way they are explicitly quantified, and explain the reason for this. Unlike the *Pred-Nonpast koto ga aru* construction, the *Pred-Past koto ga aru* construction can be quantified by iterative expressions:

(29) *Machi-no kinoo-ga mahishi, shokuba-ni ik-enak-atta koto-ga nan-do-ka aru.* (sk)

‘Lit.: There exist experiences a few times when I was not able to go to work as the city’s function was paralysed.’

(30) *Suichuu-de-no tsuushin-soochi-wa kore made ichi-do shika tsukatta koto-ga nai.* (si)

‘Lit. There exists an experience only once in which I used underwater communication equipment.’
We have discussed the fact that situations referred to in the *Pred-Nonpast koto ga aru* construction are atemporal as they refer to categories of situations. In the *Pred-Past koto ga aru* construction, however, the existential construal of situations is more anchored to time, as the domain in which the situation is referred to is delimited by the present moment in contrast to a point in time in the past. This is not to say that it cannot be delimited by a point of time in the past. As Comrie (1976: 59) notes, it is possible to delimit the period of time by a specific earlier limit as well as the present moment, as in *Bill has been to America since the war*. This characteristic makes it possible to locate a situation somewhere in time and then to count the number of occurrences with iterative expressions such as *once* and *twice*, which not only count times of situations but, incidentally, relate more than one occurrence of a situation with temporal sequence. Thus, although situations referred to in the *Pred-Past koto ga aru* construction are indefinite, they are temporally indefinite and not atemporally indefinite as is the case of the *Pred-Nonpast koto ga aru* construction.

Regarding the indefinite characteristic of the perfect, we mentioned that specific time words are not generally used with the perfect in English. At the same time we pointed out that other languages can express specific time words in the perfect construction. McCawley (1971: 105-6) attributes the reason why the English present perfect does not co-occur with a time adverb to the semantics of the existential meaning, which does not concern definiteness. He argues that just as one cannot say *I talked to someone the butcher*, one cannot say *I have written a letter yesterday*. However, in Japanese, as Makino and Tsutsui (1986: 198) note, a time adverbial denoting a specific time in the past can occur in the *Pred-Past koto ga aru* construction:
Watashi-wa go-nen mae-ni nihon-e itta
I-TOP five-year prior-at Japan-LOC went-
koto-ga aru.
NMLZ-NOM exist
‘I have been to Japan five years ago.’

(Makino & Tsutsui 1986)

However, as Inoue (1975 cited in Dahl 1985: 141-2) points out, the closer the event time to the utterance time the more unacceptable the use of such an expression.

Watashi-wa go-shuukan mae-ni nihon-e itta
I-TOP five-week prior-at Japan-LOC went-
koto-ga aru.
NMLZ-NOM exist
‘I have been to Japan five weeks ago.’

We would need to examine a sufficient number of attested examples to clarify how distant the event has to be for it to be expressed by the Pred-Past koto ga aru construction.

We should note that the English perfect construction is not the only structure which roughly corresponds to the Pred-Past koto ga aru construction and vice versa. For example, when the English past tense is understood to simply convey experience and the point in time when such a situation took place is irrelevant, the Pred-Past koto ga aru construction can be also used:

Dorisu-ni koko-ni tsurete-ko-rare-ta koto -ga
D.-DAT here-LOC bring-come-PASS-PAST NMLZ-NOM
aru. (sk)
exist.
‘Lit. There exists an experience that I was brought here by Doris.’

(32b) Doris took me here once. (FPF)

The Japanese Pred-te-iru and Pred-te-aru constructions, in which the existential verbs iru and aru are used as auxiliary verbs, sometimes express a similar meaning to the experiential perfect in English, especially when they occur with iterative expressions:

(33a) Kono tokoro nan-do-mo irashite-imasu. (sk)
this place many times coming(HON)-RESULTANT

(33b) He has been here many times recently. (FPF)

(34a) Imada-ni are-ni masaru koo-fuan-yaku-wa
yet-LOC that-DAT surpass anti-anxiety agent-TOP
nai wa. Anata-ni mo nando to naku
exist-NEG SP you-DAT also many times
soo itte-ru deshoo. (sk)
so saying-RESULTANT COP
‘Lit.: There isn’t any better anti-anxiety agent than that. I have told you that often, haven’t I?’

(34b) It is still the best anti-anxiety agent I know. And I’ve told you so how many times? (FPF)

Note that the Pred-Past koto ga aru construction cannot be used to refer to a past event which only occurs once, such as ‘dying’ or ‘graduating from high school’, while the Pred-te-iru construction can. Further, the Pred-te-
iru construction can also refer to an event which has occurred in the very recent past. This is not the case with the Pred-Past koto ga aru construction.

In this section, we have presented the Pred-Past koto ga aru construction as a case where a situation is existentially construed. We have argued that the construction provides syntactic evidence of the generally accepted semantic characteristics of the experiential past: the dual tense and indefinite reference. It was also pointed out that, compared to the Pred-Nonpast koto ga aru construction, this construction is more related to actual time as the dual tense anchors the situation in some point of time in the past, unlike the atemporally distributed situations described by the Pred-Nonpast koto ga aru construction. We explained that the reason why marked quantity is expressed by an iterative expression in the Pred-Past koto ga aru construction is because this construction anchors the situation in time.

7. Summary

This chapter has examined the two Japanese constructions: Pred-Nonpast koto ga aru and Pred-Past koto ga aru as an extension of the existential sentence in the temporal domain. In this domain, situations are expressed ontologically in an existential framework and can be quantified. We have then viewed these constructions from a localist point of view and argued that they present an example of the tendency in language to use the spatial template to express temporal conceptions. We have pointed out that they semantically correspond to the habitual sentence and the perfect construction in English respectively, and argued that they present a major case of skewing. We have shown that the Pred-Nonpast koto ga aru construction shows very similar characteristics to the generic existential sentences. We have argued that the two constructions we
have examined in this chapter provide syntactic evidence which attest to the generally accepted semantic view that situations referred to in the habitual and perfect are indefinite. We have argued this by pointing out the indefinite reading of situations in these constructions because they are construed existentially. We have also shown that the two constructions have distinctly different temporal characteristics, which are evident in the co-occurring expressions which denote marked quantity. The *Pred-Nonpast koto ga aru* construction concerns frequency and the *Pred-Past koto ga aru* concerns iterativity. We have attributed this phenomenon to temporal anchoring.

We will show the different ways both languages express the division of boundedness and unboundedness by focusing on Sections 2.1 and 2.2 will examine the semantic division in the case of non-numerical quantifiers in Japanese. In the section, we will investigate instances where Japanese and the source language primarily denote a small amount of unbounded quantity, where Japanese, which denotes bounded quantity. We will account for the semantic motivation for such a phenomenon.

2. Semantic division

In this section, we will examine the ways the bounded vs. unbounded division manifests itself in Japanese phenomena in both languages.

2.1. Categorizing the division

We pointed out in Chapter 4 that in English, the division boundedness vs. unboundedness is manifested as a contrasting grammatical categorization of count and mass nouns. In contrast, Japanese employs
Chapter 8

The Bounded vs. Unbounded Division and Skewing

1. Introduction

In this chapter we will focus our examination on skewing which reflects how English and Japanese represent the bounded vs. unbounded division. English represents this division grammatically within the noun phrase while Japanese expresses it by way of the inherent meaning of the classifier. This study will point out that this is a case of level-shift.

We will show the different ways both languages express the division of boundedness and unboundedness in Section 2, and in Sections 3.1 and 3.2 will examine how the division is reflected in the use of non-numerical quantifiers in Japanese. In Section 3.3 we will investigate instances where sukoshi and iku-ra-ka, which primarily denote a small amount of unbounded quantifiables, occur with nouns which denote bounded entities. We will account for the semantic motivation for such a phenomenon.

2. Skewing caused by different coding of the division

In this section, we will examine the ways the bounded vs. unbounded division manifests itself in skewing phenomena in both languages.

2.1 Coding of the division in the noun

We pointed out in Chapter 4 that in English, the division boundedness vs. unboundedness is manifested as a contrasting grammatical categorisation of count and mass nouns. In contrast, Japanese nouns
basically denote "collectives" or "concepts" and the division is not expressed. Lyons (1977) states:

"The difference between English and the so-called classifier-languages is that in English ... there is a grammatical distinction between countable and uncountable nouns." (Lyons 1977: 462)

Such a difference in the noun itself further relates to the pluralisation of nouns which denote bounded entities in English.

2.2 Morphological skewing within the quantifier

Quantifiers reflect the division of boundedness and unboundedness in both English and Japanese.

We pointed out in Section 3.2 of Chapter 4 that the existence of a large number of classifiers in Japanese and the compulsory use of them with numerals is considered an important characteristic of Japanese quantity expressions. However, while English uses numerals alone preceding a noun, as in two persons, it also uses an abundance of mensural classifiers which denote measuring units such as a glass of milk, and a bag of sand. We can describe this phenomenon in English from the point of view of the bounded vs. unbounded division. We can argue that English expresses this semantic division regularly by the absence or presence of classifiers. In other words, when an exact number of bounded entities is referred to, the number is expressed by a numeral by itself (such as two persons), while when an exact amount of unbounded entities is referred to, the amount is expressed by a numeral and a mensural classifier which denotes a measuring unit (such as two

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1 English also uses other types of classifiers, e.g. for collectives a flock of sheep and for generics a type of writing.
litres). Incidentally, plural marking is carried by the classifier in such a case.

In Japanese, on the other hand, classifiers are used regardless of such a division. For example, classifiers such as -nin ‘person’ and -dai ‘piece of machinery’ quantify bounded entities, while -hai ‘container’ or -tsumami ‘pinch’ quantify unbounded entities. Whether the entities they are referring to are bounded or unbounded is expressed in the inherent meaning of the classifiers themselves.

2.3 Syntactic skewing

English also expresses the bounded vs. unbounded division through different syntactic relations between a quantifier and the noun it quantifies. Lyons states (1977):

"Languages which grammaticalize the distinction between entity-denoting nouns and mass-denoting nouns tend to draw a sharp syntactic distinction between phrases like ‘three men’, on the one hand, and ‘three glasses of whisky’, on the other. Classifier-languages do not: they treat enumerable entities and enumerable quanta in much the same way." (Lyons 1977: 463)

The different ways English expresses quantity for bounded entities (as in three men) and unbounded entities (as in three glasses of whisky) appears to reflect the different semantic relationships between the quantity and the quantified entity. The noun phrase with a mensural classifier such as three glasses of whisky, syntactically resembles three of the men in the use of of, and semantically both denote parts: three glasses in the former denotes part of an unbounded entity “whisky” and three in the latter denotes part of a group of bounded entities “men”. By contrast three men (with no of) does not denote a part. On this point, we
can argue that English grammar reflects the contrasting semantic relationship between the quantity and what is quantified. *Counting* and *measuring* are expressed by different syntactic constructions. Counting concerns quantity which is external to each entity while measuring concerns the internal structure of the unbounded entity.

We will examine below whether it is true that such a division is not expressed in Japanese by the different syntactic positioning of quantity expressions. Let us first compare examples where the entities are bounded and unbounded:

(bounded)

(1) *Soto-ni-wa* patokaa-ga *ni-dai* tomatte-ori,
outside-LOC-TOP cruiser-NOM two-CL parking-is
*sorezore-ni* keikan-ga *futa-ri* notte-ita. (sk)
each-LOC policeman-NOM two-CL riding-was
‘Outside, two police cruisers were parked and there were two police officers in each of them.’

(2) *Gohan-o* san-bai tabeta. (I)
rice-ACC three-CL ate
‘I’ve had three bowls of rice.”

*Patokaa* ‘police cruiser’ and *keikan* ‘police officer’ in (1) are bounded entities while *gohan* ‘rice’ in (2) is unbounded. However, in both cases the quantifiers appear in an identical position. This also holds true when the quantifier is non-numerical:
Thus, quantifier phrases in Japanese behave in a unified manner syntactically, regardless of whether the quantified entity is bounded or unbounded, or numerical or non-numerical. The syntactic behaviour of quantifiers in Japanese is thus in conformity with the general behaviour of classifier languages described by Lyons.

To sum up, while English regularly and systematically expresses the division of boundedness vs. unboundedness grammatically through forms within the noun phrase by way of the categorisation of count vs. mass noun, the absence or presence of classifiers in quantifiers and the different syntactic positions of the quantifiers, Japanese expresses the division lexically only by way of the inherent meaning of classifiers. This means that there is a level-shift between English and Japanese in the way they express the bounded vs. unbounded division. As was discussed in Chapter 1, this is a dimension of shift between the levels of grammar and lexis which Catford proposed in addition to the notion of category-shift.
3. Non-numerical quantifiers in Japanese and the bounded vs. unbounded division

Section 2 has shown that Japanese expresses the division of boundedness and unboundedness through the semantics of classifiers and that, unlike English, it does not have other grammatical devices to reflect such a difference. If this is so, what about instances of quantity expressions which do not contain classifiers? To explore this question, we will examine the behaviour of Japanese quantity expressions which do not refer to exact numbers.

It was mentioned in Chapter 4 that English has pairs of general quantifiers which correspond to the bounded vs. unbounded division, such as *a few vs. a little; many vs. much; a large number of vs. a large volume of*, etc. (There are also quantifiers which are used with either bounded or unbounded entities such as *some* and *a lot of*.) Do non-numerical quantity expressions reflect the bounded vs. unbounded division in Japanese or not? Let us start our examination with quantity expressions which denote large numbers or amounts.

3.1 Non-numerical quantifiers indicating large magnitude

Alfonso (1974: 92) remarks that while English makes distinctions between quantifiers of a general nature for countable entities and uncountable entities, Japanese has a simpler system. He refers to contrasting examples as below to illustrate that quantifiers such as *takusan* ‘many/much’, *zenbu* ‘all of them/the whole’, *minna* ‘all of them/the whole’ co-occur with either bounded or unbounded entities. The following are his examples:

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Attested examples are in accordance with Alfonso’s remarks. For instance, zenbu expresses “all of the heavy items” in (9), and “the whole procedure” in (10):

(9) Omoi mono-wa zenbu Ochiai-keiji-ni motte-heavy thing-TOP all of them O.-detective-DAT carrying-

moratte uchi-ni kaetta. (SO)

receiving home-LOC returned

‘I returned home, getting Detective Ochiai to carry all the heavy items.’
(10) Kore-o *zenbu* hito-ri-de *yaru* tsumori
this ACC all of it one-CL-INSTR do intension
*datta* *n* desu *ka.* (sk)
COP- PAST NMLZ COP Q
‘Were you going to do all this (procedure) by yourself?’

*Ippai* expresses “many big tubs” in (11) and “a large amount of oil and rust” in (12).

(11) Dekai *boro-sen-ga* *ippai* aru *kara.* (si)
big tub-NOM many exist because.
‘Because there are many big tubs.’

(12) Abura to *sabi-ga* *ippai* tsuite-iru *kara.* (si)
oil and rust-NOM much attaching-is because
‘Because there is a lot of oil and rust attached to it.’

*Ooi*\(^2\) can also refer to both bounded and unbounded entities:

(13) *Ooku-no* *hito-wa* jibun-no *me-de* *miru* *ka*
many-GEN person-TOP self-GEN eye-INSTR see or
*te-de* fure-nai to *shi-o* ukeireru koto-
hand-INSTR touch-NEG when death-ACC accept NMLZ-
*ga* deki-nai. (sk)
NOM do-POT-NEG
‘Many people cannot accept death until they see it with their

\(^2\) The adjective *ooi* has a special formal characteristic. It takes an *i*-ending when it appears predicatively. When it occurs attributively, it takes the adverbial form *ooku* followed by a genitive case particle *no* as in the case of (13).
own eyes or touch it by hand.'

(14) Kore dake demo oo-sugiru kurai yo. (sk)
this extent even much-exceed degree SP
'This alone is almost too much.'

Hotondo also refers to both bounded and unbounded entities:

(15) Sofaa-o shimete-iru no-wa hotondo-ga
sofa-ACC occupying-is ones-TOP most of them-NOM
bijinesu-man rashik-atta. (SO)
businessmen looked like.
'Most of the people who were occupying the sofas looked like businessmen.'

(16) Joojia-no nan-bu-wa hotondo koozui-de
Georgia-GEN south part-TOP most of it flood-INSTR
nagas-arete-shimat-ta. (sk)
wash-PASS-complete-PAST
'Most of the southern part of Georgia was washed away by the flood.'

Note that quantifiers such as oozei 'many people' and zen'in 'all members' are used exclusively to quantify people:

(17) Watashi-tachi mitai-na hito-wa oozei iru wa. (sk)
we like person-TOP many exist SP
'There are many people like us.'
(18) Kore made-no tokoro zen’in-ga soo da. (sk)

this until-GEN point all members-NOM so COP

'So far all of us are like that.'

Thus, as Alfonso states, there is simplicity here in the use of quantifiers for bounded and unbounded entities. Does the same simplicity apply to non-numerical quantifiers which denote small numbers or amounts?

3.2 Non-numerical quantifiers indicating a small number or amount

What kind of non-numerical quantifiers in Japanese denote small numbers and amounts which equate to a few and several on the one hand, and a little on the other? We should first consider quantifiers such as nan-nin-ka 'a few people' and ni-san-nin 'two or three people' as candidates. Let us explain their morphological structure below.

Classifiers not only combine with numerals to denote exact numbers of entities or units of measurement, but also with interrogative words as in nan-nin 'how many people' and nan-mai 'how many sheets'. The suffixation of -ka and -mo to such an interrogative classifier will make it into a general quantifier: nan-nin-ka 'a small number of people', nan-nin-mo 'a large number of people'. Approximate quantity is expressed by a combination of two consecutive numbers and a classifier as in ni-san-nin 'two or three people' and go-roku-mai 'five or six sheets'. These quantifiers contain classifiers, and thus the bounded or unbounded distinction is always evident in the meaning of the classifier. This naturally means that they cannot be used across the bounded/unbounded division.

Secondly, the contrasting pair iku-tsu-ka and iku-ra-ka also clearly demonstrate the bounded/unbounded division. Morphologically, they
are made up of the interrogative quantifiers *iku-tsu* "how many" and *iku-ra* "how much", respectively, and the suffix -ka. *Iku-tsu-ka* quantifies bounded entities in a small number and *iku-ra-ka* quantifies unbounded entities. Their lexical distribution is very distinct, motivated by this contrasting semantic division:

(19) Daun-no aoi besuto-ni-wa chiisana sakeme-ga
    down-GEN blue vest-LOC-TOP small rip-NOM
    *iku-tsu-ka* at-ta. (sk)
    a few-CL existed
    ‘There were a few rips in the blue down vest.’

(20) Mada shakkin-ga *iku-ra-ka* nokotte-iru. (I)
    still loan-NOM a little-CL remaining-is
    ‘There is still some loan left.’

Thus, although there is relative freedom in the use of Japanese non-numerical quantifiers which denote quantity at the higher end of the scale of amount, this may not be the case with non-numerical quantifiers which denote quantity on the lower end of the scale. We will investigate this further in the next section.

3.3 The speaker’s conceptualisation and the use of *sukoshi* and *iku-ra-ka* with bounded entities

We pointed out in Chapter 2 that entities and situations can be expressed either as bounded or unbounded in English depending on our “construal” (Langacker 1987a) or our “intended conceptualisation” (Wierzbicka 1985) of the quantifiable. Although Japanese nouns themselves do not denote the division of boundedness vs.
unboundedness, the choice of quantity expressions sometimes sensitively reflects this division. Not only iku-ra-ka, but quantifiers such as sukoshi which typically denote small amounts of unbounded entities, sometimes appear with nouns which denote bounded entities. Below we will examine such instances and try to account for the phenomenon. For convenience of discussion we will only be concerned with examples of sukoshi.

Sukoshi predominantly quantifies unbounded quantifiables. For example, it expresses a short duration in (21):

(21) Sukoshi kyuukeishite ii desu ka. (I)
    a little resting good POL Q
    'Is it all right to rest for a little while?'

It often expresses a slight degree, as in (22):

(22) Shiroppoi sukoshi furui taipu da. (I)
    whitish a little old type COP
    'It is a whitish and slightly old type (of car).'

When sukoshi quantifies entities, it typically quantifies unbounded entities:

(23) Sukoshi kiboo-ga dete-kita. (I)
    a little hope-NOM emerge-out
    'A little hope has emerged.'
(24) *Sukoshi* o-kane-wa  
   a little HON-money-TOP required
   ‘It did require a small amount of money.’

*Sukoshi* can occur with nouns which typically denote bounded entities such as *tamanegi* ‘onion’. Different kinds of quantifiers used in the following pair of examples contrast how *tamanegi* is conceived in the stage of cooking i.e. as bounded in (25) and as unbounded in (26):

(25) *Tamanegi, san-ko* (KR)
   onion three-CL
   ‘Three onions’

(26) *Tamanegi-no mijin-giri, shooshoo* (KR)
   onion-GEN finely-chopped a little
   ‘Some finely chopped onion’

In (25) *tamanegi* ‘onion’ is thought of in terms of a bounded entity and its number is expressed by *san-ko* ‘three-CL’. In (26), we are talking about *tamanegi no mijin-giri* ‘finely chopped onion’. Such a state of onions is unbounded and thus its quantity can be expressed by *shooshoo*, a formal counterpart of *sukoshi*, which typically quantifies unbounded entities.

However there are cases where *sukoshi* can occur with nouns which typically refer to bounded entities. Let us imagine a situation where we have many “pencils”, which we have decided to give to participants of a game as prizes. When we divide the pencils into small *batches*, with a few in each batch, *sukoshi* can be used as well as quantifiers such as *nan-bon-ka* or *ni-san-bon*, which specifically denote the number of bounded entities.
(27) *Sukoshi/nan-bon-ka/ni-san-bon zutsu wake-mashoo.*

a little/a few-CL/two or three-CL each divide-let us

'Let us divide them into small bundles.'

In (27), the speaker is describing the few pencils as a *batch*, and once such an image is established, the boundedness of the individuals which constitute the batch seems to become less significant. When this happens *sukoshi* can be used.

What also causes one to think of plural bounded entities as a collective is when they constitute *part* of a whole. For example, let us imagine that after giving away the pencils we have three or four pencils left. The number can be expressed by *sukoshi*, as well as other quantifiers which explicitly denote plurality of bounded entities:

(28) *Mada sukoshi/nan-bon-ka/ni-san-bon amatte-imasu yo.*

still a few remaining-is SP

'There are still some left.'

Example (28) makes reference to "pencils" which are viewed as constituting part of all the pencils that used to be there. When the focus is shifted to the part/whole relationship, separate individuals which make up the part become less significant. Thus the relevance of boundedness is reduced in the conceptualisation of these pencils.

On the other hand, if bounded entities in a small number are not referred to as a batch or with any indication of a whole, the image of separateness predominates. Thus *sukoshi* is less likely to be used in a situation like below, where the speaker tries to accurately describe what he saw in the room:
In (29) there is no implication that those pencils are thought of as forming a batch or one part of many more pencils. In such a case, quantifiers which denote the number of bounded entities are likely to be used:

(29) ?Empitsu-ga  sukoshi  tsukue-no  ue-ni  atta.

pencil-NOM a little desk-GEN top-LOC existed

‘There were a few pencils on the desk.’

Sukoshi can also be used for human reference as well. In the following sentence the writer is asking his wife’s close friend whether his wife, who had almost no friends before, has made some friends recently through golf practice. Such a number of friends is emphasised by sukoshi:

(30) Empitsu-ga  nan-bon-ka/ni-san-bon  tsukue-no  ue-ni

pencil-NOM a few-CL/two or three-CL desk-GEN top-LOC

atta.

existed

‘There were a few pencils on the desk.’

(31) Gorufu-joo-no  renshuu  nanka-de  sukoshi-wa

golf-course-GEN practice something-INSTR a little-TOP

tomodachi-ga  dekita  n  ja  nai  desu  ka  ne. (H)

friend-NOM were made NMLZ COP NEG POL Q SP

‘Didn’t she make some friends through practice at the golf club?’
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The friend then states her impression of the existence of a small number of friends of the writer’s wife by using the quantifier *nan-nin-ka*, with the classifier *nin* for human reference:

(32) *Surechigatte aisatsusuru teido-no tsukiai dat-tara* pass by greet degree-GEN friendship COP-PAST-if *nan-nin-ka ita kamoshirenai kedo.* (H) a few-CL existed perhaps but
‘If you mean people who she would say hello to when she passes by, she maybe had a few.’

Contrasting the use of *sukoshi* and *nan-nin-ka*, we can say that *sukoshi* was used in (31) in contrast to “the wife having no friends before”, while *nan-nin-ka* was used in (32) as this close friend thinks of the people individually who the wife would exchange greeting with when she saw them. Thus a small number of bounded entities can be expressed as a small mass or separated individuals.

Below is another example of this kind where *sukoshi* is used to refer to a small number of people:

(33) *Hori-wa hoodai-no fukin-ni ippan-juumin-ga* H.-TOP battery-GEN vicinity-LOC general-residents-NOM *mada sukoshi iru no-o mitomete,* still a little exist NMLZ-ACC noticing *hoogeki-kaishi-o yuuyos-ase-ta koto-ga* fire-commencement-ACC hold-CAUS-PAST NMLZ-NOM *aru.* (YI) exist
‘Hori once held the commencement of firing when he noticed that there were still some civilian residents near the
battery.’

The reason why sukoshi is used in (33) to refer to a small number of people may be because those people were in the distance and were perceived as a bunch of people rather than individuated persons. Or it may be because these people constituted a small portion of all the villagers. The context does not give explicit clues.

Furthermore, when the small number of entities are thought of as scattered spatially or temporally, it is unlikely to be thought of as a small mass. Thus, it is less likely that sukoshi is used. For example, one is more likely to refer to a small number of gakusei ‘students’ by using sukoshi in (34) than in (35):

(34) Kaigi-ni-wa gakusei mo sukoshi/nan-nin-ka
    conference-LOC-TOP student also a little/a few-CL
    kite-ita.
    coming-was
    ‘There were also some students at the conference.’

(35) Ima madeni mo sonna gakusei-o
    now until also like that student-ACC
    ??sukoshi/nan-nin-ka oshieto koto -ga aru.
    a little/a few-CL taught NMLZ-NOM exist
    ‘I have taught a few students like that over the years.’

The gakusei ‘students’ in (34) physically existed together in the same place (at the conference) and at the same time. Such spatial closeness is easily interpreted as a small mass and thus increases the likelihood of gakusei being quantified by sukoshi. However, gakusei in (35) refer to students who the speaker has encountered over a period of time. They are thus
less likely to be conceived of as forming a mass and thus there is less likelihood of them being quantified by sukoshi. The following is an attested example in which the plurality of patients whom the doctor has encountered over the years is translated with nan-nin-ka ‘a few people’ in Japanese rather than sukoshi.

(36a) Kore made-ni hotondo ningen to-wa
this until-LOC almost human being QUO-TOP
omo-e-nai yoo-na kanja-ni nan-nin-ka
think-POT-NEG like patient-DAT a few-CL
deatta koto-ga aru kedo. (sk)
encountered NMLZ NOM exist but
‘Lit.: Up until now, I have come across several patients who hardly appeared human.’

(36b) I have had patients over the years who were almost not of this world. (FPF)

This section and the previous section have examined how non-numerical quantifiers reflect the bounded/unbounded division in Japanese. We have found that as Alfonso (1974) observes, Japanese makes less distinction between this semantic division in the use of non-numerical quantifiers which denote quantity on the higher end of the scale of amount. However, we have shown that there is a stronger semantic motivation to express the division when the quantity referred to is on the lower end of the scale of amount. I suggest that the reason for such a phenomenon is because the notion of boundedness is more relevant when a smaller number is concerned. In other words, the larger the number of entities referred to, the less significant the individuals become and thus the whole group of bounded entities are more likely to
be conceived of as one collective unit. This relates to Wierzbicka’s (1985: 355) observation that “insignificance of individual items” is reflected in the category of collective nouns in English. In contrast, when the number is smaller, the separateness of each individual is more relevant, and thus the division between bounded and unbounded is more salient in conception and thus in description.

However, despite there being a tendency for bounded entities to be expressed as bounded when they exist in a smaller number, when the speaker does not think of them as strongly individuated, he/she can refer to them using quantifiers such as sukosho, shoosho and iku-ra-ka, which primarily denote quantity of unbounded quantifiables.

4. Summary

In this chapter we have seen how the division of boundedness and unboundedness is expressed differently in English and Japanese.

Section 2 showed that English systematically expresses the division of boundedness and unboundedness grammatically while Japanese does not. We pointed out that this difference in grammaticalisation of the semantic division causes skewing of various kinds: in the count vs. mass noun distinction, the absence and presence of classifiers, and the syntactic positioning of numeral-classifier phrases. We pointed out that the only way that Japanese expresses such a division is through the semantics of the classifiers. In other words, the division is expressed systematically within the noun phrase in English, while in Japanese it is expressed through the semantics of classifiers. The study pointed out that this is a case of level-shift.

Having shown this, we inquired in Sections 3.1 and 3.2 whether or not Japanese expresses the division of boundedness and unboundedness in quantifiers which do not have numerals. The examination revealed
that quantifiers which denote larger quantities can cross the threshold more easily than quantifiers which denote smaller quantities. We attributed that phenomenon to the speculation that generally the larger the number of bounded entities, the less the relevance of individuation becomes in our mind.

In Section 3.3 we looked at instances which contradict the findings of Sections 3.1 and 3.2, where quantifiers such as sukoshi, which primarily denote a small quantity of unbounded quantifiables, are used with nouns denoting bounded entities. We attributed the motivation for such a phenomenon to the speaker’s construal of bounded entities.
Two Additional Functions of Japanese Quantifiers

1. Introduction

In Chapter 8 we examined quantifiers from the perspective that they denote the division of boundedness and unboundedness of entities. In this chapter, we will examine two more functions Japanese quantity expressions serve apart from their primary semantic function of denoting quantity.

After briefly examining the plurality marking of entities in Japanese, the major part of this chapter will look into cases where numerical quantity expressions are used to mark plurality, where such marking is forced in order to maintain contextual coherence (Section 3) and sentential cohesion (Section 4) or to convey the image of individual entities intended by the speaker (Section 5). We will point out that plural marking by numerical quantity expressions is a case of level-shift as well as rank-shift, in which a grammatical item in English is expressed by a lexical item in Japanese. In other words, English expresses plurality within the NP head by the suffix -s while Japanese expresses it by a quantifier outside the noun phrase. We will also point out that plural marking in English is compulsory, in contrast to Japanese, where it occurs only where demanded for semantic or pragmatic reasons.

Section 7 will show that some quantity expressions are often used as plural anaphoric expressions in Japanese. We will point out that numerical quantity expressions not only serve as anaphoric expressions
as NP heads but in other syntactically skewed positions from English as well.

2. Plurality marking of entities in Japanese

In Section 2 of Chapter 4 we discussed how differently English and Japanese mark plurality from a typological point of view. We pointed out that in a language such as English, a noun denotes an individual member of a category. Thus not only the distinction between bounded and unbounded entities but also the distinction between singularity and plurality are grammatically indicated by a plural suffix. On the other hand, in a language such as Japanese, a noun is transnumeral and simply denotes concepts, and in line with languages of this kind, Japanese does not obligatorily mark plurality in general, although some exceptional cases are noted below.

However, this does not mean that Japanese cannot express plurality in contrast to singularity. There are lexemes and suffixes which convey plurality of entities in Japanese. For example, although limited in productivity and restricted in usage to human reference, there are suffixes such as -tachi, -domo, and -ra. The suffix -tachi is attached to a noun of general human reference to express plurality such as gakusei-tachi ‘students’ and hahaoya-tachi ‘mothers’. It can also be attached to nouns in the case of definite reference to express “a group of people represented by that person” such as Tanaka-san tachi ‘Mr Tanaka and the others represented by him’ and ano hito tachi ‘that person and the others represented by him’, rather than “more than one Tanaka”. Suffixes such as -ra and -domo are sociolinguistically restricted and are not used as often as -tachi for general human reference.

There are also grammatical classes of plural personal and spatial demonstrative pronouns in Japanese which are derived by adding these
plural suffixes. For example, suffixing -tachi or -ra to a singular pronoun such as watashi 'I', anata 'you' and kanojo 'she' yields plural counterparts such as watashi-tachi 'we', anata-tachi 'you-plural', kanojo-tachi 'she and those people', and kare-ra 'he and those people'. However, for the reason stated in the immediately preceding paragraph, kanojo-tachi does not necessarily refer to a group of females but rather to a group of people represented by one particular female person. In the same way, kare-ra does not necessarily refer to a group of males. Suffixing -ra to spatial demonstratives such as kore 'this', sore 'that near you' and are 'that over there' derives corresponding plural demonstratives such as kore-ra 'these', sore-ra 'those near you' and are-ra 'those over there'. Although these plural expressions for humans and plural demonstratives in Japanese appear to correspond to those in English in terms of forming a grammatical class, their usage is different. Firstly, as part of a general feature of Japanese, when the antecedent is understood, the whole noun phrase is often elided. Secondly, plural reference is often expressed by other means. We will discuss this in detail in Sections 3 and 7.

There is also a small group of reduplicated nouns such as yama-yama 'mountains' and hito-bito, 'people' in Japanese which are duplicates of yama (mountain) and hito (person), which express plurality of those bounded entities. However, this only applies to certain kinds of nouns, and although some are used more generally, others are only used in a literary or poetic context. For instance, in the following example from Shizukani nagare yo, Temuzu-gawa 'Flow quietly, The Thames', Kimura (1981: 62), a Japanese essayist, uses this reduplicated form to express her empathy for "people" who live in "countries" where winter is long, cold and dark:
Thus, although there are devices for encoding plurality in nouns in Japanese, their use is limited and not productive. Does this impediment sometimes hinder the intention of communication? In the following, although the original English text (2b) marks the plurality of friends and customers, in the Japanese translation (2a) there is no explicit plural marking for their corresponding NP heads shitashii kata ‘close person (HON)’ and o-kyaku-sama ‘HON-guest-HON’. However, it is clearly understood from the context that they refer to plural entities:

(2a) Mainen kansha-o komete shitashii kata ya
every year gratitude-ACC including close people and
tokubetsuna o-kyaku-sama-o go-shootai-suru
special HON-customer-HON-ACC HON-invite
n desu. (sk)
NMLZ COP

(2b) Every year we do this to show appreciation to friends and special customers. (FPF)
Apart from suffixation by -tachi, -ra, -domo and reduplication of nouns, Martin (1975: 143-54) suggests that there are other devices in Japanese which express or imply plurality. The devices he suggests include: the presence of numerical quantifiers; prefixes such as ta- 'many' and sho- 'various'; nouns which are inherently plural such as oyako 'parent(s) and child(ren)', and fubo 'father and mother'; nouns which lexically incorporate numbers such as futago 'twins' and ryoote 'both hands'; verbs and adverbs which imply plural entities such as atsumaru 'gather' and betsu-betsu ni 'separately' or aida ni 'between'. Our concern in this chapter is the use of quantifiers as plural markers, which presents a case of level-shift. In Sections 3 and 4 we will examine instances where quantifiers are used to express plurality of entities without which the noun phrase would yield a singular reading. Section 3 will examine this from the point of view of maintaining contextual coherence and Section 4 from the point of view of sentential cohesion. Section 5 will examine instances where quantifiers are used to avoid a generic/collective reading.

3. Contextual coherence

In this section we will examine instances where pluralities of entities are explicitly expressed in order to maintain contextual coherence. First we will look at cases of definite reference, both human (3.1) and non-human (3.2), followed by examples of indefinite reference (3.3).

3.1 Plurality marking of definite reference: human reference

Let us look at the a scene in the novel Utsukushisa to Kanashimi to (Beauty and Sadness) where reference is repeatedly made to “two apprentice entertainers”. The scene is set in a room where the main male character, Oki, meets the female main character, Otoko, after twenty years of separation. In order to avoid direct confrontation with Oki, Otoko had
arranged to have her apprentice and two entertainers present in the room.

When the entertainers are mentioned for the first time, the quantifier appears NP-externally (note that the entertainers are expressed as maiko in the original Japanese text and as geisha in the English translation):

(3a)  Otoko-no  hoka-ni  maiko-ga  futa-ri  
      O.-GEN    apart from   entertainer-NOM   two-CL  
      kite-iru. (UK)  
      coming-is  
      'Lit.: Apart from Otoko herself, there are two apprentice entertainers.'

(3b)  Awaiting them... were two young apprentice geisha, besides Otoko herself. (bs)

When these entertainers are mentioned again, rather than being referred to by an expression such as kanojo-tachi 'she-PL', they are referred to either by the plural form of maiko, maiko-tachi, by a noun phrase which contains the noun maiko and a pre-nominally placed quantifier, or by an NP-externally placed quantifier with the suffix -tomo.:

(4a)  Maiko-tachi-wa ...  iromachi-no  onna  
      entertainer-PL-TOP  pleasure quarter-GEN   woman  
      da    kara, (UK)  
      COP  because  
      'Lit.: Because the apprentice entertainers are women of the pleasure quarter,'

(4b)  The geisha ... were women of the pleasure quarter. (bs)
(5a) *Maiko-tachi-no* Kyoo-kotoba ... (UK)
entertainer-PL-GEN Kyoto dialect
‘Lit.: Kyoto dialect of the entertainers …’

(5b) their soft Kyoto voices (bs)

(6a) *Futari-no maiko-wa* Otoko-no *soba-ni ita.* (UK)
two-GEN entertainer-TOP O.-GEN side-LOC existed
‘Lit.: The two geisha were beside Otoko.’

(6b) Okoto remained at one side, between the geisha. (bs)

(7a) *Maiko-wa futa-ri-tomo* ... *omeshi* *nado-o*
entertainer TOP two-CL-together ordinary kimono etc.-ACC
kite-ita. (UK)
wearing-were
‘Lit.: The apprentice entertainers, the two of them, were
wearing ordinary kimonos.’

(7b) Both geisha were in ordinary kimonos. (bs)

The absence of the plural suffix *-tachi* or the quantifier *futa-ri* in
the above examples would yield a definite singular interpretation “the
apprentice entertainer” and thus would conflict with the intended
meaning. The absence of *futa-ri-tomo* in (7a) would yield either a
definite singular interpretation “the apprentice entertainer” or a
“collective” reading, i.e. there were many entertainers and all of them
were wearing kimonos. This “collective” reading caused by the absence
of quantifiers will be discussed in Section 5.

In the above examples, although it is clear from the context that
what is referred to is plural (i.e. “the two entertainers”), their plurality
needs to be explicitly marked. Its absence would have failed to maintain contextual coherence. This means that context alone is not sufficient to imply the plurality of these definite noun phrases, and that contextual coherence forces the explicit marking of plurality. Okutsu (1986: 75) points out that “Japanese does not mark either single or plurality of entities. However, an unmarked noun tends to be interpreted as denoting a single entity”. In other words, the singular reading implied by the absence of plural marking in these noun phrases overrides the contextual implication of plurality of the referent.

3.2 Plurality marking of definite reference: non-human reference

Let us now look at cases where the plurality of non-human reference is expressed, where the suffix -tachi cannot be used. We examined some examples from Sophie’s World in Chapter 5 containing reference to “the two letters” in order to illustrate how the pre-nominal placing of quantifiers yields a specific reading of the noun phrase. Let us re-examine these examples, but this time from the point of view of plural marking.

When Sophie receives a letter one afternoon from an unknown sender, this letter is referred to as nazo no tegami ‘mysterious letter’ in the Japanese translation in (8a) and as the mysterious letter in the English translation in (8b):

(8a) Sorekara nazo-no tegami-o te-ni,  
After-that mysterious letter-ACC hand-LOC  
kittchin-no isu-ni koshi-o-kaketa. (ss)  
kitchen -GEN chair-LOC sat down

(8b) Then she sat down on a kitchen stool with the mysterious letter in her hand. (sw)
When she receives another letter, "the two letters" are now referred to by the quantifier *ni-tsuu* and the noun *tegami* in Japanese in (9a):

(9a) **Ni-tsuu-no nazo-no tegami-no tame-ni,**
    two-CL-GEN mysterious letter-GEN sake-LOC
    Sofii-wa atama-ga kurakura shite-kita. (ss)
    S.-TOP head-NOM dizzy doing-came
    ‘Lit.: Because of the two mysterious letters, Sophie’s head started to became dizzy.’

while there is no quantifier in the English translation in (9b) below:

(9b) *The mysterious letters had made Sophie’s head spin.* (sw)

The presence of the quantifier *ni-tsuu* is semantically essential to express the "plurality" of these mysterious letters in Japanese. Without it, the noun phrase *nazo no tegami* would imply "the single letter", and thus would contradict the intended meaning:

(9a)' **Nazo-no tegami-no tame-ni,**
    mysterious letter-GEM sake-LOC
    Sofii-wa atama-ga kurakura shite-kita.
    S.-TOP head-NOM dizzy doing-came
    ‘Because of the mysterious letter, ....’

In English, on the other hand, in terms of plural marking, mentioning the number "two" is redundant:
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(9b) The two mysterious letters had made Sophie’s head spin.

(sw)

Since this is not human reference, the suffix -tachi cannot be used to indicate plurality of the tegami ‘letters’ or fuutoo ‘envelopes’. In the total of eight instances where reference to “the two letters” or “the two envelopes” was made in this section of the story, all contained the quantifier ni-tsuu in the Japanese translation. In seven of them the pre-nominally placed quantifier occurred with the NP head. Without the quantifier, the noun phrases in the following examples would yield a singular reading:

(10a) Sofii-wa ni-tsuu-no tegami-o motte, (ss)
S.-TOP two-CL-GEN letter-ACC holding
‘Lit.: Holding the two letters, Sophie …’

(10b) Clutching the two envelopes in her hand, (sw)

(11a) Moo ichido Sofii-wa ni-tsuu-no fuutoo-o
once again S.-TOP two-CL-GEN envelope-ACC
aketa. (ss)
opened
‘Lit.: Sophie opened the two envelopes again.’

(11b) She opened the two envelopes again. (sw)

(12a) Daiichi-no nazo-wa ni-tsuu-no shiroi fuutoo-o
the first-GEN mystery-TOP two-CL-GEN white envelope-ACC
Sofii-no uchi-no yuubin-bako-ni
S.-GEN house-GEN mailbox-LOC
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ireta no-wa dare ka. (ss)

placed one-TOP who Q

‘Lit.: The first mystery is who was it that had put the two white envelopes in the mailbox of Sophie’s house.’

(12b) The first problem was who had put the two white envelopes in her mailbox. (sw)

(13a) Demo kono chabuttoo-wa ni-tsuu-no

but this brown-envelope-TOP two-CL-GEN

shiroi fuutoo to onaji yoo-ni, ...(ss)

white envelope with same like

‘Lit.: But this brown envelope ... like the two white envelopes...

(13b) The brown envelope ... exactly like the two white ones ...

(sw)

(14a) Kireina ishi-ga ippai haitta ookina kukkii-no

pretty stone-NOM a lot placed big cookie-GEN

kan kara ishi-o yuka-ni buchimakeru to, tin can from stone-ACC floor-LOC scatter and

ni-tsuu -no ookina fuutoo-o ireta. (ss)

two-CL-GEN big envelope-ACC placed

‘Lit.: After throwing the stones onto the floor from a big cookie tin in which there were many beautiful rocks, she put the two large envelopes into it.’

(14b) She emptied the stones onto the floor and put both large envelopes into the tin. (sw)

(15a) Ittai kono ni-tsuu-no tegami-wa

on earth this two-CL-GEN letter-TOP
doko kara kita no daroo. (ss)
where from came NMLZ I wonder
‘Lit.: I wonder where on earth these two letters came from.’

(15b) And anyway where did the letters come from? (sw)

In (16a) below, the quantifier itself forms the head of an NP:

(16a) Dai-ni-no nazo-wa, sono ni-tsuu-ga
second-GEN mystery-TOP that two-CL-NOM
nagekakeru muzukashii mondai. (ss)
throw-at difficult question
‘Lit.: The second mystery is the difficult questions those
two pose.’

(16b) The second was the difficult questions these letters contained. (sw)

While the quantifier is present in all of the examples in the Japanese translation, this is not the case in the corresponding English version. Although “the two letters” or “the two envelopes” are referred to by a noun phrase containing a quantifier in (10b), (11b), (12b) and (13b), both is used in (14b) and there is no quantifier in (9b), (15b) and (16b). In English, even without the quantifiers two or both, the noun phrases in all of the examples express plurality of the letters and envelopes because it is encoded in the head of the noun phrase by the plural suffix -s. In this sense, the presence of a quantifier is redundant in English. However, in the immediate context, “the two letters” plays a focal role in the development of the story and this quantifier may serve to highlight the
particularity of “these two letters”, which are thought of as one “topical” unit.

The examination of plural marking in the definite noun phrases above has shown that in these instances plural marking was obligatory in Japanese to maintain contextual coherence in terms of the plurality of the antecedent. The absence of plural marking would yield a singular definite reading of the noun phrase. This section has shown that quantifiers fulfil the function of expressing plurality. We can claim that, although numerical quantifiers such as *futa-ri, ni-tsuu* and *futa-tsu* denote specific numbers, their primary function in these instances is not so much to convey numerical exactness, but rather, to mark plurality of entities.

In passing, it is interesting to point out a phenomenon where plurality of the noun phrase is marked other than by the suffix -s in the English translation of the scene in *Beauty and Sadness*. The translator has chosen a Japanese loan word *geisha* to refer to those apprentice entertainers and thus morphologically deprived himself of marking plurality within the noun itself. Because of this, whenever reference is made to those two entertainers by the noun phrase containing *geisha*, he has had to use other devices available in English to indicate plurality. There are three kinds of plural marking observed. Interestingly, one of them uses a quantifier:

(17) *The two geisha sat across from each other at an open brazier.*

(bs)

(18) *The two geisha poured for them.* (bs)

In the example below, verb agreement and use of the plural noun *women* indicate plurality:
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(19) The geisha, though, very young, were women of the pleasure quarter. (bs)

A pronoun also helps to indicate the plurality of the noun phrase:

(20) Oki walked beside the geisha to shield them. (bs)

Grammatical devices and lexemes such as the above, which compensate for the obstruction of morphological plural marking, are not available in Japanese.

3.3 Plurality marking of indefinite reference

Quantifiers are not only used to maintain coherence with antecedents of definite reference. They are also used with indefinite reference to explicitly indicate plurality. For instance, in the following example, the plurality expressed by the suffix -<i>s</i> in the NP head in the original English text was explicitly expressed by the quantifier <i>iku-tsu-ka</i> 'a few' in the Japanese translation:

(21a) Daun-no aoi besuto-ni-wa chiisana sakeme-ga
       down-GEN blue vest-LOC-TOP small rip-NOM
       <i>iku-tsu-ka</i> atta.
       a few-CL existed (sk)
'Lit.: There were a few small rips in his blue down vest.'

(21b) His blue down vest bore tiny rips. (FPF)

The absence of the quantifier in the above Japanese translation would yield a singular reading "one tiny rip" and thus would not convey the
semantics of the original English sentence. As the English text only indicates plurality by the plural suffix, plurality is expressed by the neutral term *iku-tsu-ka* ‘a few’ in Japanese. As pointed out in Section 3.2 of Chapter 8, suffixation of -ka to interrogative classifiers such as *iku-tsu* ‘how many (general) things’ and *nan-nin* ‘how many people’ make general quantifiers such as *iku-tsu-ka* and *nan-nin-ka* in Japanese. Below are further examples of this kind:

(22a) Kore made-ni hotondo ningen to-wa
    this until almost human being QUO-TOP
    omo-e-nai yoo-na kanja-ni nan-nin-ka
    think-POT-NEG like patient-DAT a few-CL
    deatta koto-ga aru kedo. (sk)
    encountered NMLZ-NOM exist but

(22b) I have had patients over the years who were almost not of
    this world. (FPF)

(23a) Takkaa-wa keikan-o nan-mei-ka anata-no
    T. TOP police officer ACC a few-CL you-GEN
    goei-ni wariateru dake da. (sk)
    escort-DAT assign only COP

(23b) All [Tucker] does is assign certain cops to you. (FPF)

Compared to 21 (a), however, the absence of the quantity expression would not necessarily yield a singular reading of *kanja* ‘patient’ in (22a) and *keikan* ‘police officer’ in (23a). This may be because the context and/or the real world knowledge could suggest that ‘a doctor could encounter more than one patient during his or her career who is almost out of this world’ and that ‘more than one police officer could be assigned
as guards'. However, the presence of the quantity expression ensures the plural reading.

In the following example, the plural suffix in the English *hard times* is explicitly quantified by an iterative expression in Japanese *nan-do-ka* 'a few times'.

(24a) Ruushii-wa komatta jookyoo-ni ochiitte

L.-TOP troubled situation-LOC falling in

watashi-o shinu hodo shinpais-are-ta koto-ga

I-ACC die degree worry-CAUS-PAST NMLZ-NOM

kore madeni nan-do-ka aru. (si)

this until a few times exist

'Lit.: There have been a few times when Lucy fell into a troubled situation and frightened me.'

(24b) Lucy had been through hard times and that had seriously frightened me. (CD)

As well as in translations, quantifiers are used to mark plurality of indefinite referents in original Japanese texts as well:

(25a) Kyooto ni wa shiriai wa iku-nin-ka

Kyoto in TOP friend TOP a few-CL

aru ga, (UK)

exist but

'Lit.: There are a few friends in Kyoto, but …'

(25b) He had friends in Kyoto, but … (bs)

The original Japanese has a quantifier *iku-nin-ka* 'a few', explicitly denoting that "He had more than one friend in Kyoto". If this quantifier
was not present, the reading could be ambiguous, as the context and the real world knowledge allow either a singular or a plural reading. The English translation, however, does not need to use a quantifier (*some*, or *a few* could have been used), and plural marking by the plural -s in *friends* is sufficient to express the plurality.

How Japanese expresses plurality by quantifiers outside the noun phrase illustrated above concords with Jakobson’s (1992: 148) observation: “If some grammatical category is absent in a given language, its meaning may be translated into this language by lexical means.” It is a case of level-shift as well as rank-shift, where plurality is expressed by a grammatical morpheme in English while it is expressed by the presence of a lexical element of a sentence, e.g. a numerical quantifier in Japanese.

4. **Sentential cohesion**

Thus far we have examined instances where the absence of quantifiers would violate contextual coherence. In these cases, the absence of explicit marking of plurality would simply yield a singular reading of the noun phrase, which would be inappropriate as it would conflict with the contextual understanding, but it would not be ungrammatical. There are cases, however, where a Japanese sentence becomes “ungrammatical” if there is no explicit plural marking:

*(26a)*  
*Futa-tsu-no toire-no aida ni hasam-are-ta*  
two-CL-GEN toilet-GEN between sandwich-PASS-PAST  
*chiisana raunji-e itta.* (sk)  
little lounge-LOC go-PAST  
‘Lit.: We went to a small lounge sandwiched between two toilets.’
(26b) We ... went to a small lounge tucked between rest rooms.

(FPF)

The plurality of the "rest rooms" is encoded by the plural marker -s in English and there is no explicit mention of "two", while in the Japanese example there is a quantifier *futa-tsu "two"*. If it were not for the quantifier, the Japanese sentence would be ungrammatical:

(27)*Toire-no aida ni hasam-are-ta
  toilet-GEN between sandwich-PASS-PAST
chiisana raunji-e itta.
little lounge-LOC go-PAST
'We went to a small lounge sandwiched between the toilet.'

The ungrammaticality of (27) results from the lack of sentential cohesion, i.e. there is a semantic conflict between the singular reading of *toire* 'toilet' and the semantics of the expressions *aida ni* 'between' and *hasamareta* 'being sandwiched', both of which lexically assume that there are "two" separate toilets. The following is another example to illustrate this point, this time including human reference:

(28a) *Futa-ri-no maiko-wa hibachi-ni*
  two-CL-GEN entertainer-TOP open brazier-DAT
  mukaiatte-ita. (UK)
  facing (each-other)-was

(28b) The two geisha sat across from each other at an open brazier. (bs)
The absence of *futa-ri* would conflict with the meaning of the verb *mukaiau* ‘to face each other’.

This kind of plural marking is not only found in translated texts. The following is an original Japanese sentence, where the quantifier *ni-mai* ‘two sheets’ is used solely because the semantic motivation forces the presence of the quantifier to mark plurality:

(29) *Shiitsu-o* ni-mai shiki, ... ningen-wa  
    sheet-ACC two-CL laying people-TOP  
    ni-mai-no shitatsu-no aida ni hasamatte  
    two-CL-GEN sheet-GEN between being sandwiched  
    nemuru no desu. (SN)  
    sleep NMLZ COP  
    ‘[British people] lay down two sheets, ... and people sleep tucked between the two sheets.’

Although in these cases the quantifier denoting “two” is used to express the duality of entities, if we examine plural marking phenomena in a wider linguistic context we can find other devices in Japanese to express plurality. For example, duality can be expressed as below:

(30) Dansei-yoo to josei-yoo toire-no aida ni  
    Male-use and female-use toilet-GEN between  
    hasamareta ...  
    sandwich-PASS-PAST  
    ‘Sandwiched between the male and female toilets …’

where, instead of a quantifier such as *futa-tsu*, the identity of each entity is named. In the same way *ni-mai no shitatsu* in (28) can be expressed as:
(31) Jooge-no shiitsu-ni hasamarete,
top-and-bottom-GEN sheet-DAT sandwich-PASS-and,
'Sandwiched by top and bottom sheets,'

Jooge 'top and bottom' is not an explicitly numerical word.

Examples were found which demonstrate that plurality may be expressed by adverbial phrases which describe spatial distribution of entities:

(32a) Ruushii-ga maki-o kubeta node, hibana-ga
L.-NOM log-ACC put into a fire because spark-NOM
musuu-ni tobi, susu darake-no
in countless fashion flying soot full-GEN
entotsu-ni suikom-arete-itta. (si)
chimney-LOC suck-PASS-went
'Lit.: As Lucy shoved wood inside, sparks scattered in a countless manner, and they were sucked into the chimney full of soot.'

(32b) Sparks swarmed up the chimney's sooty throat as [Lucy] shoved more wood inside. (CD)

(33a) Ai-kyuujuugo sausu-ni-wa aikawarazu torakku-ga
I-95 South-LOC-TOP as usual truck-NOM
ooku, dooro-wa achikochi-de kooji-o
many road-TOP all over-LOC construction-ACC
shite-ita. (sk)
doing-was
'Lit.: There were many trucks along I-95 South as usual
and construction was going on all over the place.'

(33b) There were many trucks and much construction along a stretch of I-95 South. (FPF)

Other examples illustrate that plurality of entities is sometimes expressed in Japanese by temporally oriented adverbs rather than spatially-oriented quantifiers:

(34a) Okashina tegami-wa tokidoki kuru kedo,
strange letter-TOP sometimes come but
kooiu shigoto-o shite-iru to, sore-wa
like this work-ACC doing-is when, that-TOP
mezurashii koto de-wa nai kara. (sk)
rare thing COP-TOP NEG because
‘Lit.: Strange letters arrive sometimes. But in my business it is not unusual.’

(34b) I get some strange mail, but that’s fairly routine in my business. (FPF)

(35a) Kare-no kudasu kettei-wa itsumo konna
he-GEN give decision-TOP always like this
fuu-ni ma-ga nukete-iru no da. (sk)
like pause-NOM lacking-is NMLZ COP
‘Lit.: Decisions he makes are always this silly.’

(35b) I couldn’t resist pointing out that most of his decisions were about this bad. (FPF)

So far we have presented instances which require plural marking to avoid yielding a singular reading. However, there are many instances
where plural marking is not required in Japanese where what is referred to is more than one entity. Although this chapter does not aim to provide a comprehensive picture of the plural marking phenomenon in Japanese nor attempt to suggest all the rules which govern plural marking in that language, in the next section we will present some instances where plural marking is not required. The findings should in turn contribute further to an understanding of when explicit plural marking is required in Japanese.

5. The absence of plural marking

The examination so far has shown that one reason for marking plurality is so that the noun phrase will not yield a singular reading. From the opposite point of view, we can say that one reason for not marking plurality is to denote singularity of the referent. There are still other instances where plurality marking is not required. They are when the noun phrase expresses a generic reading (5.1) or a collective reading (5.2). We will examine each of these in turn and show how such readings can be prevented by the presence of explicit plural marking.

5.1 Generic reading

In Section 3.1, we looked at examples in which the noun *maiko* ‘apprentice entertainer’ appears with plural marking in anaphoric noun phrases. We showed that plurality is marked either by a quantifier or by the suffix -tachi. There are, however, other instances in the same scene where *maiko* appears without any plural marking:

(36a) Onna-deshi-no hoka ni maiko made
female-apprentice-GEN apart from entertainer even
kite-iru. (UK)
coming-is
'Lit.: Apart from the female apprentice, even entertainers have come as well.'

(36b) But to have two geisha, besides her pupil! (bs)

(37a) Konna maiko-o yobu koto made like this entertainer-ACC invite NMLZ even kangaeta no daroo. (UK) think-PAST NMLZ probably

‘Lit.: I suspect that’s why she even thought of having such people as entertainers as well.’

(37b) She had decided to invite the geisha. (bs)

(38a) Jochuu-ga sake to tsumami-o hakonde-kita. maid-NOM sake and tidbit-ACC carrying-came

Maiko-ga shaku-o shita. (UK) entertainer-NOM pouring-ACC did

‘Lit.: A waitress brought sake and tidbits. The entertainers poured sake into our cups.’

(38b) A waitress brought sake and tidbits. The two geisha poured for them. (bs)

In (36a), (37a) and (38a), maiko appears without plural marking. However, what maiko expresses here is different from the previous examples. In (36a) and (37a), maiko is used with a generic sense. They refer to a “type” of person rather than to particular individuals or a group. The noun phrase in these sentences means “people of such profession”. It appears that the image of plurality may become less relevant when we refer to entities in a generic way. This observation concords with Downing’s (1996: 207) statement, “When the emphasis is
on category identity, the ‘plural marker’ [suffixes such as -tachi] is
avoided; when it is on individual identity, the ‘plural marker’ is used.”

(38a) is slightly different. Although, the noun phrase maiko refers
to those two entertainers performing their duties, the focus of the
sentences is to contrast the two types of services performed in the scene,
one of bringing sake and tidbits and the other of pouring the sake into the
cups, and the two different groups of people performing the different
services. The former is performed by a maid and the latter by the
entertainers. In this sense we can say that the writer chooses to refer to
the entertainers generically in contrast to jochuu ‘maid’ and thus does
not use plural marking. However, if the writer had wanted to project an
image in which the two individual entertainers were cheerfully and
busily pouring sake for the three guests, he could have marked plurality
with -tachi or by a quantifier:

(38a)'Jochuu-ga sake to tsumami-o hakonde-kita.
maid-NOM sake and tidbit-ACC carrying-came
Maiko-tachi-ga shaku-o shita.
entertainer-PL-NOM pouring-ACC did

(38a)' describes the “two entertainers” pouring sake into cups. Thus, in
this case, it is up to the writer to refer to the entertainers either
“generically” in contrast to the maid without any plural marking or “as
two individuals” with plural marking. Plural marking in Japanese seems
to be used to reflect the speaker’s perception of plural entities as strongly
“individuated” or “separated” entities.
5.2 Collective reading

Let us return to the example we briefly examined in Section 2 as a case where plurality is not explicitly marked although it is clear from the context that the noun phrase refers to plural entities:

(2a) Mainen kansha-o komete shitashii kata ya
every year gratitude-ACC including close people and
tokubetsuna o-kyaku-sama-o go-shootai-suru
special HON-customer-HON-ACC HON-invite
n desu. (sk)
NMLZ COP

(2b) Every year we do this to show appreciation to friends and
special customers. (FPF)

It is clear from the understanding of the real world that shitashii kata and tokubetsuna o-kyaku-sama refer to plural entities and not single people. However, in this case, the customers are perceived as a “collective” entity. In other words, the focus is on a collective whole of friends and customers rather than on individual entities. Let us tentatively suggest that when plural entities are perceived “collectively”, explicit plural marking is not called for in Japanese, just as in the case of a generic reading. With this hypothesis, let us look at a few more examples from the same scene where reference is made to these “friends” and “special customers” who are invited to the Christmas dinner at the restaurant as guests.

The first time the party guests are mentioned, it is by the restaurant owner when he gives a reason to the main character and her companion for not allowing them into the restaurant. In the Japanese translation, even without the quantifier, the plurality of o-kyaku-sama in the
restaurant is inferred. The quantifier oozei ‘many’ in the NP-external position adds information about the size of the crowd:

(39a) Naka-ni-wa o-kyaku-sama-ga oozei
inside-LOC-TOP HON-customer-HON-NOM many
irasshaimasu node,’ (sk)
exist(HON) because
‘Lit.: There are many guests inside, so …’

(39b) We have many people inside (FPF)

After a while the main character is allowed in the restaurant and this is how she describes the people in the restaurant:

(40a) Dainingu-ruumu-ni-wa paatii-fuku-sugata-no
dining-room-LOC-TOP party clothes appearance-GEN
kyaku-ga afurete-iru ga, (sk)
customer-NOM overflowing-is but
‘Lit.: The dining room is overflowing with guests in party clothes,’

(40b) Guests in party clothes filling most of the dining room (FPF)

The collective reading of kyaku and its size is expressed by the semantics of the verb afureru ‘to overflow’.

The next example describes how the restaurant owner returns to the other guests after having a chat with the main character and her companion. Again o-kyaku has a collective reading:

(41a) Hoka-no o-kyaku-no hoo-e
other-GEN HON-customer-GEN direction-LOC
O-kyaku is modified by hoka no ‘other’, whose meaning naturally divides all the guests of the restaurant into two groups, i.e. the main character and her companion on the one hand and the rest of the guests on the other. Thus hokano o-kyaku strongly projects an image of the “other unit” of people. It is interesting to see how the original English conveys this non-individuated image by a collective noun (his) party.

The above examples all project the collective image of the party guests. However, in the example below -tachi is attached to kyaku:

(42a) Kyaku-tachi-wa kanpaishitari, tabetari, customer-PL-TOP toasting eating shabettti, warattari shite-iru. (sk) chatting laughing doing-is

‘Lit.: The guests were toasting, eating, talking and laughing.’

(42b) They were toasting, eating, talking, and laughing ... (FPF)

The suffixing of -tachi enables (42a) to convey a strong image of guests as separate individuals rather than a collective group, describing how some people are doing one thing while others are doing different things.

The above observation suggests that plural marking of plural entities is not required in Japanese when they are perceived as a collective unit where the individual entities are not in focus. This relates to the grammatical category of “collective nouns” in English. Wierzbicka states
that one of the reasons for uncountability is “insignificance of individual items” (1985: 335). By contrast, when the entities constituting the unit are perceived as strongly individuated, as in example (42a), we find marking of plurality by -tachi.

To elaborate this point, let us examine how a collective reading is prevented by the presence of a quantifier such as iku-tsu-ka ‘a few’:

(43a) Enkei-no hiroba-no mawari-no
    circular GEN plaza-GEN periphery-GEN
furui gaitoo-no akari dake-de-wa
old street light-GEN light alone-INSTR-TOP
tari-nai node, raito-ga iku-tsu-ka
insufficient because light-NOM a few-CL
setchi-sarete-iru. (sk)
set up-CAUS-is
‘Lit.: As the light from the old post lamps at the periphery of a circular plaza is not sufficient, several lights have been set up.’

(43b)...where lights had been set up to aid old post lamps at the periphery of a circular plaza.

In the above example, two sets of entities are referred to, “post lamps” and “lights”, both located at the periphery of a circular plaza. In English both are marked by the plural suffix -s. In Japanese, on the other hand, while gaitoo ‘post lamps’ has no plural marking, the plurality of raito ‘light’ is expressed by iku-tsu-ka ‘a few’. We can explain the semantic motivation behind these different representations. As we imagine the circular plaza, we readily envisage that there are many gaitoo ‘post lamps’ erected at regular intervals all around the periphery of the plaza: the
projected image is collective, expressed by no plural marking. On the other hand, the translator imagines *raito* ‘lights’ to be fewer in number than the *gaitoo* as they are added to the setting to give extra light. Thus by using the quantifier *iku-tsu-ka*, the translator prevents the collective reading. The next example is a further illustration of this.

(44a)  *Mariino-wa heya-no mawari-ni aru*  
Marino-TOP room-GEN periphery-LOC exist  
*iku-tsu-ka-no raito-bokkusu-ni kakager-are-ta*  
a few-CL-GEN light box-LOC hang-PASS-PAST  
*kimi-no-warui tansai meianga-o*  
gruesome light-coloured chiaroscuro-ACC  
mimawashita. (sk)  
looked around  
‘Lit.: Marino looked around at the morbid chiaroscuro which are hung on the light boxes around the room.

(44b)  *Marino glanced around at the morbid chiaroscuro displayed on light boxes around the room.  (FPF)*

The semantics of the adverbial phase *mawari ni ‘around (the room)’* and the verb *mimawasu* ‘to look around (them)’ both indicate the peripheral placing of the light boxes. But the presence of the quantifier *iku-tsu-ka* suggests that the light boxes are not hanging all around the room in large numbers nor placed at regular intervals. Without this quantifier, the sentence would give the impression that there were many light boxes placed regularly around the whole room. Thus, the presence of the quantifier *iku-tsu-ka* again helps project an image of individuated plurality and prevent a collective reading of the noun phrase.
In this section, we have identified two more reasons for the absence of plural marking in Japanese, apart from the conveying of a singular reading. They are: a generic reading and a collective reading. We suggest that in all these three cases, the absence of plural marking conveys the image of a "singularity". The first case concerns a "singular entity", generic reference concerns a "singular category" of entities, and the collective reference concerns a "singular collection" of entities. As far as we have seen in our examination, plurality marking, either by a suffix such as -tachi or by quantifiers, breaks the image of singularity by explicitly indicating that there are more than one of such singular entities or that there are many individuated items constituting a singular whole.

6. Summary of plurality marking and use of quantifiers

Summing up this examination of plural marking in Japanese, we can claim that plural marking is only called on when it is forced by contextual coherence, by sentential cohesion, or when the speaker wants to convey an image of individual entities.

We have shown that quantifiers are used to express plurality in Japanese. In other words, apart from their semantic function of denoting quantity, Japanese quantifiers have a distinct function of plural marking. Looking at this linguistic phenomenon from a skewing point of view, there is a level-shift between English and Japanese: English primarily encodes plurality grammatically in the head noun with the suffix -s, while Japanese encodes it lexically, independent from the head noun. We can suggest that the two languages skew in their motivation for representing the division between singularity and plurality. The division is grammatically encoded in English, but is restricted in Japanese, only being required for maintaining sentential and contextual coherence.
7. Quantifier function in anaphoric reference

We will now move on to the examination of how quantifiers are used as anaphoric expressions in Japanese, in particular plural reference. As discussed in Section 2, Japanese has sets of plural demonstratives such as kore-ra ‘these’ and sore-ra ‘those’, and lexemes which express plural human reference such as watashi-tachi ‘we’, kare-ra ‘he-PL’, and kanojo-tachi ‘she-PL’. These expressions form distinct word classes which are equivalent to the corresponding English word classes. However, although English expressions such as these and they serve a regular grammatical function as anaphoric expressions, in Japanese, not only does ellipsis serve this function wherever possible, but nouns and quantifiers are often used as anaphoric expressions in their place. In this section we will examine three ways in which quantifiers serve as anaphoric expressions in Japanese. First we will examine cases where quantifiers themselves are used as NP heads, which does not involve skewing from English (7.1). Then we will examine cases in which quantifiers are used in anaphoric expressions, with skewing from English (7.2 and 7.3).

7.1 As NP-heads

In recognition of the more widely observed phenomenon in numeral classifier language that classifier phrases can substitute for nouns, and expanding on Hinds’ (1978) brief observation that quantifiers are an anaphoric alternative, Downing (1986, 1996) studies the anaphoric role of numeral-classifier pairs [“numerical quantifiers” in this thesis] in Japanese. Downing states that the numeral-classifier pair is a “useful addition to the Japanese anaphoric inventory” (1986: 371). Her study

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1 For studies on the anaphoric system of Japanese, see works such as Mikami (1970), Hinds (1975) and (1978), Hinds and Hinds (1979) and Clancy (1980).
shows that “non-contrastive anaphoric uses of classifiers occur most often with the classifier -nin, used to denote people, and the small numbers other than ‘one’” (1996: 169). She attributes the predominance of the classifier -nin to the fact that “people are more likely to be the topic of any extended discussion in which repeated reference to particular individuals is required” (1996: 171). She also explains the reason numbers over “three” do not appear in the anaphoric form is because “the larger the number, the less likely it is that the individuals composing the grouping will be conceived of as individuals” (1996: 170).

Downing further inquires into how the classifier phrases help compensate for the anaphoric function which other devices cannot provide. Her examination shows that numeral-classifier pairs occupy a unique position in the Japanese anaphoric system, firstly because they can appear a considerable time after the last mention of the antecedent, and secondly because they constitute a stylistic alternative to the use of pronouns which often carry “impersonal or affected tone” (1996: 189).

Her examination, however, concentrates on examples where the numeral-classifier pair is used as a full fledged noun followed by a case particle, i.e. an NP-head, which corresponds to the English pronoun position. Some of her examples are as follows:

(45) Ima futa-ri-wa ryokoo-ni dete-iru to
now two-CL-TOP trip-LOC going-is QUO
itte-okimashita.
saying-was
‘The two of them are away on a trip now.’ (I) said.’
(Downing 1996)
In the above examples, the numeral-classifier pairs *futa-ri* and *o-futa-ri* occupy the position of the head noun of a subject and an indirect object respectively, which correspond to the syntactic position of pronouns and other anaphoric expressions in English.

Below we will show that if we do not restrict our observations to the syntactic position of an NP head, we can argue that numeral quantifiers in Japanese serve anaphoric functions in other syntactic positions as well, which do skew syntactically with English pronoun positions.

### 7.2 Pre-nominal construction

The first instance is the case where a numerical quantifier pre-nominally modifies the NP head:

(6a) *Futari-no maiko-wa Otokono soba-ni ita.* (UK)

\[
\text{two-CL-GEN entertainer-TOP O.-GEN side-LOC exited}
\]

‘The two geisha were beside Otoko.’

(9a) *Ni-tsuu-no nazo-no tegami-no tame-ni,*

\[
\text{two-CL-GEN mysterious letter-GEN sake-LOC}
\]
Because of the two mysterious letters, Sophie's head became dizzy.

In Section 3 of this chapter we examined such noun phrases in the light of the function of the quantifier, which is to maintain the contextual coherence of the plurality of referents. The pre-nominally placed quantifier in such cases also helps determine the reference. Thus, from a referential point of view, we can consider a pre-nominal construction as a whole as an alternative anaphoric device in Japanese.

Although Downing (1996: 245) labels one of the functions of the pre-nominal construction as “repeated mention” of referents, in contrast to its function of introducing referents for the first time in written text, and although in a different chapter (see Downing: 159-91) she argues that a numeral-classifier pair which is a full-fledged NP head should be considered as a useful addition to the inventory of the Japanese anaphoric system, she does not consider the pre-nominal construction as a whole to be part of the inventory. This may be due to the fact that the pre-nominal construction is a noun phrase and not a lexeme. However, if we do not restrict our examination of the semantic and pragmatic function of anaphoric devices to one-to-one comparisons between elements belonging to the same syntactic rank, such as word-to-word or phrase-to-phrase, we can argue that these noun phrases in Japanese can equate, in a functional and pragmatic way, to anaphoric lexemes such as pronouns and demonstrative nouns in English. This is a case of rank-shift between a word and phrase. Of course, the anaphoric systems in both languages differ considerably, and we cannot in a stricter sense equate the pre-nominal construction to any grammatically governed use.
of English pronouns and demonstratives. However, we can say that the pre-nominal construction, as a noun phrase, may serve as an anaphoric device in the same way as numeral-classifier pairs acting as NP heads can.

7.3 NP-externally placed quantifiers denoting totality

In Japanese an ellipted noun phrase can also be referred to anaphorically by a certain kind of quantifier in the NP-external position. We have seen in Chapter 5 that the NP-external construction expresses the indefiniteness of quantified entities. However, quantity expressions such as minna ‘all, whole’, ryoooho ‘both’ and futa-ri-tomo ‘both’ ensure that the quantity expression refers to a definite referent even while it is NP-externally placed. This is because of the semantic characteristic of these quantity expressions, i.e. they denote totality. Quantity expressions such as minna ‘all, whole’ and ryoooho ‘both’ inherently denote a total number. The suffix-tomo is attached to a numerical-classifier pair to mean that the number is a total number, as in futa-ri-tomo ‘the two of them’ and san-nin-tomo ‘the three of them’:

(47a) Saikin ja kono atari-no omawari-san-wa minna
recently COP this area-GEN policeman-HON-TOP all
haidora-shokku-dan-o tsukatte-iru yo. (sk)
hydra-shok-bullet-ACC using-is SP
‘Lit.: Cops around here, all of them, are using Hydra-Shok these
days.’

(47b) All the cops around here are using Hydra-Shok these days.
(FPF)

(48a) Maiko-wa futa-ri-tomo ... omeshi nado-o
entertainer-TOP two-both ordinary kimono etc.-ACC
Minna in (47a) and futa-ri-tomo in (48a) express the total number of the definite referents kono atari no omawari-san ‘cops around here’ and maiko ‘entertainers’ respectively. Thus, when the class of entities denoted by the noun phrase is definite, these quantity expressions denote the totality of such a definite referent.

Therefore, in a wider pragmatic sense not only the pre-nominal construction but the NP-external construction can have a definite reference. In Section 2 of Chapter 5 we noted Downing’s quantitative observation that the pre-nominal construction is dispreferred in oral text. However, this does not mean that quantified entities which are definite cannot be freely expressed in spontaneous discourse, as quantity expressions which express totality undertake such a function while NP-externally placed.

Often this semantic characteristic of these quantity expressions enables them to serve as anaphoric expressions when the definite noun phrase is elided:

(49a) Minna himei-o agete ware saki-ni doa-e all scream-ACC raising I before door-LOC toshin-shi aruiwa yuka-ni haitsukubatta. (sk) charge-and or floor-LOC crawled ‘Lit.: (The people at the scene), all of them, competed their way to the door or crawled on the floor.’
(49b) People screamed and fought for the door and got flat on the floor. (FPF)

(50a) Futari-tomo Otoko to najimi no yoo-da ga, ... (UK) two-CL-together O. with friend COP seems but 'Lit.: (The entertainers,) the two of them, seem to be friends of Otoko.'

(50b) Both of them seem to be friends of Otoko. (bs)

(51a) Futari tomo booshi-o kabutte-ita node two-CL-together cap-ACC wearing-was because kisushi-nikui. (sk) kissing-hard 'Lit.: Because (we,) the two of us, were wearing caps it was hard to kiss (each other).'

(51b) Both of us wore caps, which made it difficult to kiss. (FPF)

Minna in (49a) and futari-tomo in (50a) and (51a) express the totality of the definite referents to which the ellipted noun phrase would be referring, such as sono ba ni ita hito 'the people who were at the scene' in (49a), maiko 'the entertainers' in (50a) and watashitachi 'we' in (51a). This is a case of class-shift. In Japanese, quantifiers are used as anaphoric expressions while they are placed adverbially outside the noun phrase, while in English anaphoric expressions have to occupy an argument position.

Quantifiers followed by the instrumental case particle de are also used anaphorically with an added meaning of "doing something together" in Japanese. Let us compare how the pronoun we in original
Chapter 9

English sentences are translated by a quantifier plus *de* in their Japanese translations:

(52a) *We walked in silence to where the detective had pointed.* (FPF)

(52b) *Odoneru-keiji-ga sashita tokoro made futa-ri-de O.-Detective-NOM pointed place as far as two-CL-INSTR damatte aruita.* (sk)

silently walked

‘Lit.: (We,) by two of us together, walked silently to the place where the detective had pointed.’

(53a) *Then we ordered cups of lentil soup and spaghetti bolognaise.* (FPF)

(53b) *Sorekara futa-ri-de renzumame-no suupu to then two-CL-INSTR lentil-GEN soup and supagetii boroneezu-o chuumonshita.* (sk)

spaghetti Bolognaise-ACC ordered

‘Lit.: Then, (we,) by two of us together, ordered lentil soup and spaghetti bolognaise.

(54a) *We lifted Anthony Jones from the stretcher to the table,* ...  (CD)

(54b) *Minna-de Antonii Joonzu-o sutoretchaa kara all-INSTR A. J.-ACC stretcher from dai-no ue-e utsushita.* (si)

table-GEN top-LOC moved

‘Lit.: (We,) by all of us together, moved Anthony Jones from the stretcher to the table.
(55a) A little later, we moved the body into the autopsy suite.

(55b) Suu-fun-go mata minna-de itai-o

several-minute-later again all-INSTR corpse-ACC

kaiboo-shitsu-ni hakonda. (sk)

autopsy-room-LOC carried.

‘Lit.: A few minutes later, (we,) by all of us together, moved the body to the autopsy room again.’

In the above examples, the translator uses an NP-externally placed quantity expression as an alternative anaphoric device to the lexically available personal pronoun watashi-tachi ‘we’ in Japanese.

Numerical quantifiers followed by shite ‘doing’ are also used anaphorically with an added meaning of “togetherness” or “mutuality”.

(56) [Kanako-tachi wa] futa-ri shite kao-o

K.-PL two-CL doing face-ACC

miawaseru to nantonaku ki-ga

mutually look at and somehow feeling-NOM

karuku natta. (I)

light became

‘When (Kanako and her partner,) the two together, looked into each other’s face, they felt better.’

(57) Nenmatsu kara shoogatsu ni-wa futa-ri shite

year end from new year-LOC-TOP two-CL doing

sono kuruma-de Shiga-koogen e sukii ni dekaketa. (I)

that car-INSTR S. highlands-LOC ski-LOC went

‘From the end of the year to the new year the two together went to Shiga Highlands for skiing in that car.’
Distributive quantifiers such as *sore-zore* ‘each of them’, *hitori-hitori* ‘every one’ can also be viewed as referring to the totality of a definite referent. Often they appear adverbially while the definite noun phrase is ellipted:

\[(58)\]  
[Sankasha wa]  
\[\text{Sore-zore/hitori-hitori}\]  
participants-TOP each one  
chigau  iken-o motteita. (I)  
different opinion-ACC had  
‘(The participants,) one by one held different opinions.’

From a skewing point of view, this phenomenon of anaphoric reference being expressed by quantifiers outside the noun phrase in Japanese presents a class shift between English and Japanese since in English quantifiers with anaphoric reference are expressed as arguments while in Japanese they can be used NP-externally.

Anaphoric expressions such as personal pronouns and demonstratives on the one hand and quantifiers on the other clearly belong to different grammatical categories. However, if we examine the semantic information encoded in typical anaphoric expressions and quantity expressions, it is not surprising that the latter can serve an anaphoric function. By this we mean not only that quantifiers express the singular/plural contrast but also that in Japanese they regularly carry information about the entities indicated by the classifier. For example, *futa-ri* refers to people, *ni-mai* refers to two flat entities. The encoded information in the quantifier helps identify the ellipted noun phrases.
8. Summary

In this chapter, we have examined two additional functions which Japanese quantifiers serve apart from primarily denoting quantity. Firstly, we have shown that numerical quantity expressions are sometimes used to mark plurality. We pointed out that this phenomenon presents a case of level-shift as well as rank-shift, since in English plurality is primarily marked grammatically by the plural suffix -s, while in Japanese it is marked by a lexeme which occurs outside the noun phrase. Furthermore, we have pointed out that the use of quantity expressions to mark plurality is for maintaining contextual coherence and sentential cohesion, and for expressing the image of individual entities. In other words, plurality is only marked when its absence would yield a singular reading or a generic/collective reading. We suggested that there is a shift in the motivation for representation of the division between singularity and plurality between the two languages. In English such marking is obligatory, whereas in Japanese it is more restricted. Apart from the use of some plural lexemes and suffixes, plural marking in Japanese is often motivated by semantic and pragmatic factors.

Secondly, we have shown that some quantity expressions are used as anaphoric expressions in Japanese, not only as NP heads but also in combination with a NP head and in an NP-external position. We have also pointed out that the notion of class-shift enables us to roughly equate the pragmatic function of quantifiers with pronouns in English. We have further noted that semantic information relating to characteristics of entities encoded in classifiers enables them to recover the reference of the elided element.
Chapter 10

Miscellaneous Cases of Skewing

1. Introduction

In this chapter we will look at various examples within the semantic area of Quantity which present skewing between English and Japanese. The items which will be discussed below are selective and the analysis is by no means comprehensive. However, our purpose is to demonstrate how successfully we can apply the notions and the approach developed in this study to provide satisfying semantic explanations for formal discrepancies between the two languages.

The sections below analyse both Japanese and English lexical items involved in relevant cases of skewing. Section 2 will show how the quantitative value of yoku in Japanese is interpreted differently according to the semantic characteristics of quantifiables and how they are expressed by different subclasses of adverbs in English. We will also look at more prominent instances of skewing cases between yoku and the corresponding rank-shifted constructions in English. Section 3 will look at how the Pred-tari suru construction, a tense-less form of a verb, rank-shifts to full English clauses. Section 4 will show that the lexeme bakari in Japanese finds no equivalent in English not only because it does not have a semantic equivalent in English and because its meaning is interpreted differently depending on the context but also because English lacks a word-subclass which corresponds to the one this word belongs to. Section 5 will look at how changes in the semantic scope of the verbalizing suffix -sugiru in Japanese cause skewing with too in English. Section 6 will look at skewing between almost and hotondo, some of
which present major cases of skewing. Section 7 will show a class-shift between the comparative form of quantifiers and adjectives in English and verbs denoting change in Japanese.

2. Yoku

2.1 Multiple interpretations of yoku and corresponding expressions

In this section we will look at how the adverb yoku in Japanese is used to denote or imply different types of quantity notions and how such multiple interpretations of a single quantity expression in Japanese correspond to a range of lexemes belonging to different sub-classes of adverbs in English.

In Chapters 6 and 7 yoku was introduced as a frequency adverb meaning ‘often’. In such a case it appears with a predicate which expresses temporally bounded situations:

(1a) Sochira-sama-wa yoku koko-e o-mieninaru
You(HON)-TOP often here-LOC come (HON)
sukaapetta-sama-no go-shinzoku de-wa nai
S.-MR-GEN HON-relative COP-TOP NEG
no desu ka. (sk)
NMLZ COP Q
‘Lit.: Aren’t you a relative of Mr Scarpetta who comes here often?’

(1b) You are not related to the Scarpetta who comes here often?
(FPF)
Yoku also occurs with stative predicates to convey the high degree of quality expressed by such predicates; for example audible state as in (2a), visibility as in (3a), and a state of knowing something as in (4a):

(2a) Watashi-no koe kikoeru?
    I-GEN voice audible
    Hai, yoku kikoemasu yo. (si)
    yes, well audible SP
    ‘Lit.: Can you hear me? Yes, I can hear you well.’

(2b) Am I transmitting? You’re fine. (CD)

(3a) Shita-o kuguroo to shita ga, keeburu-ga
    under-ACC pass QUO did but, cable-NOM
    doko kara doko-e nobite-iru no ka
    where from where-LOC stretching-is NMLZ Q
    yoku mienai.
    well visible
    ‘Lit.: I tried to get under it, but I could not see where the
    cable was coming and going well.’

(3b) I tried to get under it, but I really could not see where it was
    coming from or going. (CD)

(4a) Watashi-wa jibun-no genkai-o yoku shoochishite-
    I-TOP self-GEN limitation-ACC well knowing-
    iru wa. (si)
    is SP
    ‘Lit.: I know my limitations well.’

(4b) I absolutely know my limitations. (CD)
As far as the quantitative value of *yoku* is concerned, its point on the scale of amount, which is on the higher end of the scale, clearly extends across the notions of high frequency and high degree of quality of a certain state. In the latter, English uses expressions other than the frequency adverb *often* to reflect different types of quantity notions.

Furthermore, when occurring with verbs denoting action, *yoku* sometimes seems to mean quantity of unbounded entities, and at other times, duration. Let us look at (5) first:

\[(5) \text{Ano hito-wa yoku tabemasu.}\]

that person-TOP much eat

'That person eats a lot.'

The equivalent of *yoku* in (5) is "a lot" of food, which is an amount of an unbounded entity.

However, the impression that *yoku* denotes the amount of an unbounded entity in (5) results from *implicature* rather than direct denotation. *Yoku* in (5) cannot co-occur with a direct object and denote a large amount:

\[(5)' \text{Ohiru-ni chippusu-o yoku tabeta.}\]

lunch-LOC chips-ACC much ate

'I ate a lot of chips for lunch.'

In such a case, the quantifier *takusan* is used to quantify *chippusu* 'chips':

\[(6) \text{Ohiru-ni chippusu-o takusan tabeta.}\]

lunch-LOC chips-ACC much ate

'I ate a lot of chips for lunch.'
It may be that *yoku* in (5) is not expressing quantity of food, but is referring to the manner of the action of "eating", i.e. "He eats well." "Eating well" implies that the quantity of what is eaten is "a lot".

In the following example, *yoku* appears to express "a long time", which also corresponds to the high position on the scale of amount:

(7) *Yoku neta.*

much slept

'I slept for a long time.'

However, the interpretation of duration ('a long time') again seems to be an implicature resulting from the primary meaning of *yoku* which concerns the manner of sleep: good quality sleep. In the real world, "sleeping well" is strongly associated with sleeping for an undisturbed stretch of time. The length of time can be explicitly expressed by expressions such as *nagai aida* 'a long while' as in (8):

(8) *Nagai aida neta.*

long while slept.

'I have slept for a long time.'

*Nagai aida* only refers to the stretch of time and how one slept is irrelevant. Thus one can say either:

(9) *Nagai aida neta kedo, yoku ne-rare-nak-atta.*

long while sleeping-was but well sleep-POT-NET-PAST.

'I was asleep for a long time but I couldn’t sleep well.'

or
Thus, from the close semantic examination above, we can argue that although *yoku* appears to express different quantity notions such as a large amount of unbounded entity as in (5) and duration as in (7), these are only implicatures. Such implicatures seem to result from associated notions of situations such as “eating” and “sleeping”, i.e. “eating” would involve “things to be eaten” and “sleeping” inherently occurs over a certain stretch of time.

We can go even further and apply this observation to the reading of *yoku* expressing frequency. We can argue that the interpretation of frequency in an example such as (1a) also results because “someone coming to this restaurant” is viewed as a bounded situation and thus the high degree of manner (or quality of situation) is viewed in terms of how many times it occurs. Morphological support for this argument come from the fact that *yoku* is derived from the adjective *yoi*, which means “good”.

What we have examined above is not a case of class-shift since *yoku* is an adverb, and its corresponding meanings are expressed adverbially in English as well. However, it is a case where one adverb in Japanese corresponds to various semantic subcategories of adverbs in English. We have argued that the basic meaning of *yoku* is interpreted in different ways, such as frequency, degree, duration and amount of unbounded entities, depending on the semantic environments. We have also pointed out that the point on the scale of amount to which *yoku* refers is consistently transferred across quality and quantity notions of different types.
2.2 Cases of prominent skewing involving *yoku*

We will now present two instances of skewing where habituality is expressed by the adverb *yoku* in Japanese while it is expressed by rank-shifted structures in English.

*a. Used to and *yoku*

Habituality in the past is often expressed by the auxiliary verb phrase *used to* in English:

(11a) *I used to come into the city when I was growing up.* (FPF)

(11b) *Kodomo-no koro *yoku* kono machi-ni kita yo.* (sk)

child-GEN time often this town-LOC came SP

'I often came to this town when I was a child.'

Although (11a) does not contain a frequency adverb, it expresses the persistent occurrence of an event in the past. The meaning of (11a) can be otherwise expressed by a frequency adverb both in Japanese and in English as in (11b), and (12) below.

(12) *I came into the city *often* when I was growing up.*

In (11b) and (12), the two semantic components encoded in *used to*, i.e. past tense and persistent occurrence of the situation "coming into the city", are encoded separately, i.e. past time is expressed by the verbs *kita* 'came' in (11b) and *came* in (12), and the notion of frequency is expressed by the frequency adverbs *yoku* 'often' in (11b) and *often* in (12) respectively. In Japanese this is one of the normal methods of expression of habituality of the past.
b. Tend to and yoku

As was noted in Section 2.1 of Chapter 7, it has often been pointed out that habitual aspect has something in common with generic statements. Frawley (1992: 316) remarks that the habitual is a kind of extension of an event into “customary” practice. It concerns a phenomenon in which a situation occurs commonly or persistently. In English, tendency is often expressed by the phrase tend to:

(13) Mary tends to be late.

(13) is a generic statement describing Mary’s habit. It means that out of all the occasions where Mary is expected to arrive at a certain place at a certain time, on many of such occasions she does not arrive on time. Thus (13) can be paraphrased as a habitual sentence using a frequency adverb:

(14) Mary is often/frequently late.

Japanese does not have a phrasal equivalent for tend to but has a lexical equivalent for tendency, i.e. keikoo. Thus, tend to can be expressed as keikoo ga aru ‘there is a tendency’.

(15) Merii-wa okurete-kuru keikoo-ga aru.

Mary-TOP delaying-come tendency-NOM exist

‘Mary has a tendency to be late.’

However, the use of the phrase keikoo ga aru is limited to certain contexts, and tendency is often expressed by the frequency adverb yoku:
(16) Merii-wa yoku okurete-kuru.
Mary-TOP often delaying-come.
‘Mary often arrives late.’

Thus (16), in which tendency is expressed by the frequency adverb yoku in Japanese, is a semantic equivalent of (13), in which tendency is expressed by the auxiliary verb phrase tend to. They seem to be used in a similar range of contexts. In the following examples, another frequency expression in Japanese tsune “usual” is translated into English with tend to.

(17a) Yoru mo shigoto-no aida-wa nemuri-ga asakute,
night also work-GEN period-TOP sleep-NOM shallow and
shigoto-ni kakawaru yume-o mitari suru
work-LOC concern dream-ACC seeing do
no-ga tsune na no ni. (UK)
NMLZ-NOM usual COP NMLZ although
‘Lit.: At night as well, his sleep is shallow while he is
working (on a novel), and it is usual that he has dreams which
are related to his work, though.’

(17b) While he was writing a novel he tended to sleep poorly at
night and to dream about his work. (bs)

We have seen two cases of rank-shift above where habituality is
typically expressed by frequency expressions in Japanese, while such a
notion may be expressed by rank-shifted constructions in English.
3. The Pred-tari suru construction

The common Japanese construction *Pred-tari suru* roughly translates as “do things such as this and that”, in which exemplified events are expressed by the -tari form of a verb, which does not carry tense. The number of exemplified events can be more than one:

(18a) *Mariino-wa ... maki-o hakonde-kitari, tabako-o suttarishi-nagara, atari-o urotsuite-ita.* (si)

(18b) *Marino prowled about, carrying in more wood and smoking ....* (CD)

(19a) *[Kaiten-isu-wa] sukoshi hayaku nattari, yuruyaka-ni nattari, tokidoki mawattari,*

(19b) *Sometimes [the revolving chair] went a little faster, or a little slower, or even stopped and began turning in the opposite direction.* (bs)

This structure shares a common characteristic with the *Pred-Nonpast koto ga aru*” construction in Japanese examined in Chapter 7: it expresses events atemporally as categories. English can express a similar meaning using gerunds such as *carrying in more wood and smoking*, as in the
original English sentence in (18b). However, from the point of view of actual likelihood of usage, the Pred-tari suru construction is comparable to the conjoining of full predicates in English.

Furthermore, when more than one event takes place in turn over a space of time, English contrasts such a pattern using the frequency adverb sometimes:

(20) Sometimes I go to movies and sometimes go shopping.

In Japanese, the Pred-tari suru construction expresses a situation like this as well.

Thus, Pred-tari suru construction in Japanese presents a case of skewing where predicates in English are rank-shifted to a tenseless -tari form of a verb and expressed atemporally as categories of events.

4. Bakari and quantification

Various usages of the particle bakari present interesting cases of skewing. The reason for this skewing is not only because there are no lexemes or structures in English which match the exact meaning of bakari, but also because there is no sub-class of word class in English which corresponds to this word.

Bakari occurs in different syntactic situations with various meanings, each of which deserves a full explanation. However, we are concerned here with cases where bakari expresses what is conventionally accepted as a “restrictive” meaning, which would roughly correspond to English adverbs such as only and nothing but. For instance, Martin (1975: 102) categorises one of the uses of bakari as a “restrictive” particle and describes this meaning as “exclusive, all the time; only, just”. Makino and Tsutsui (1986: 87) state the meaning of bakari as “there is nothing
except what is stated”. While pointing out the skewing of structures, we
will argue that the restrictive meaning of bakari only results from the
immediate context or from our real world knowledge, and that it does
not come from the meaning of bakari itself, which simply denotes “a very
large number”¹. We will also point out that such a quantitative notion
can also transfer across to the temporal notion of “high frequency”. Let
us start with an example where bakari occurs with a noun which denotes
bounded entities:

(21a) Denisu-wa biiru bakari nonde-iru. (DBJG)
     Dennis-TOP beer many drinking-is.

(21b) Dennis is drinking only beer. (DBJG)

As can be seen in (21a), when bakari follows a noun, the case particle for
the noun phrase is usually dropped. The meaning of bakari in a sentence
such as (21a) is often interpreted as only, as shown in the translation
provided by Makino and Tsusui in (21b). There is always a sense of
delimitation of members of other possible categories when bakari is used
in such an environment. However, bakari does not seem to have an
exclusive force in itself. It primarily means something like “very many
things of the same kind”. The extreme number can be expressed without
evoking a sense of delimitation. For example, bakari was used in the
Japanese translation (22a) for full of people in the original English
sentence (22b), which does not convey exclusiveness.

¹ The examples and translations given below tend to actually suggest a meaning of
“totality”. However, “totality” cannot be taken literally, and so bakari is interpreted as
an obvious exaggeration, and hence understood as implying “a very large number”.

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(22a) Kono yo-wa nanimo shinai hito bakari de, this world-TOP nothing do-NEG people many COP
watashi moo unzari na no. (sk)
I EMP disgusted COP NMLZ

(22b) The world is full of people who don’t do anything, (FPF)

In the following example again there is no explicit expression of delimitation in the original English sentence, while bakari is used in the Japanese translation:

(23a) Anata, shinda hito-no koto bakari ki-ni kake-
you dead person-GEN thing many feeling -LOC hanging-
nagara, jinsei-o okutta to kangaeta koto aru? ...
while life-ACC spent QUO thought NMLZ exist
Anata-no baai, ningen kankei-tte subete
you-GEN case human relationship-QUO all
shinda hito to no ... (sk)
dead person with NMLZ

(23b) Does it strike you Katie, that you’ve spent most of your life
worrying about dead people. ... I think all your relationships are
with the dead ... (FPF)

Thus, its primary force is not to exclusively delimit one category from other possible categories, but such an exclusive reading seems to arise as a result of emphasising the existence of a large number of members of one category. This inherent meaning of bakari does not have a single equivalent among English quantifiers, but is conveyed by different expressions depending on the interpretation of bakari in the immediate context.
The semantics of *bakari* for quantifying entities are also projected into the temporal domain. Syntactically, when *bakari* quantifies situations, it either appears in the frame *Pred-te bakari iru* as in (24a) and (25a), or follows a direct object as in (26a) below.

(24a) *Tomoko-wa asonde *bakari* *iru.* (DBJG)
T.-TOP playing many is

(24b) *The only thing Tomoko is doing is playing (=Tomoko is doing nothing but playing).* (DBJG)

(25a) *Okaasan naite *bakari* *iru wa.* (sk)
Mother crying many is SP

(25b) *She’s been crying a lot.* (FPF)

(26a) *Mukashi kara watashitachi-wa kenka* *bakari shite-kita.* (si)
long time ago from we-TOP fight many doing-came

(26b) *All our lives together we had fought.* (CD)

As for the meaning, (24a) means that the situation of “Tomoko’s idling” occurs persistently. (25a) and (26a) also mean that the situations of “Mother crying” and “us fighting (with each other)” occur very often. Although *bakari* is placed syntactically close to the direct object *kenka* ‘fight’ in (26a), the semantic connection between *kenka* and the verb *suru* ‘do’ is very strong, and *bakari* is quantifying the whole action of “fighting”.

Comparing the meanings that *bakari* yields in these examples, the sense of delimitation is stronger in (24a) as there is an expectation that
Hanako should be doing other activities such as “studying” or “helping out with housework”. However, in (25a) the action of “crying” is not compared to other activities that a person is expected to do and there is no sense of exclusive delimitation. The same goes with the action of “fighting (with each other)” in (26a).

Thus, as was the case with quantified entities, the interpretation of *bakari* varies in terms of its sense of delimitation when it quantifies situations. This parallel arises because the basic semantics of *bakari* cut across the spatial and temporal division.

Accordingly, different expressions are used in English equivalents, causing skewing. Sometimes, delimiting words such as *only*, or structures such as *nothing but* convey the inferred meaning of *bakari* as in (24b) above. English also uses frequency adverbs such as *always, all the time, too often* to express high frequency:

(27a) *Naze obasan-no mi-ni-wa sooiu koto bakari*  
why aunt-GEN body-LOC-TOP like that thing many  
*okoru no (sk)*  
occur NMLZ

(27b) *Why does this always happen to you?* (FPF)

Examples are found in which persistence of situations is expressed by verbs such as *keep*, as in (28b), and by an expression such as *tired of*, as in (29b), while it is expressed by *bakari* in the Japanese translations:

(28a) *Apaato-de mitsuketa mono-no koto bakari iu*  
apartment-LOC found thing-GEN thing many say  
*no ne. (si)*  
NMLZ SP
(28b) You keep referring to whatever it is you found. (CD)

(29a) Moo unzari-na no yo. Konpyuutaa ya robotto-no EMP disgusted NMLZ.SP computer and robot-GEN puroguramingu bakari s-ase-rarete. (si) programming many doing-CAUS-PASS

(29b) I am tired of programming computers and robots. (CD)

To sum up, skewing arises around the use of a word like bakari for two reasons. One is that there is no word in English which denotes exactly the same meaning as bakari and that its interpretation is often subject to the context. The second reason is that there is no word class which corresponds to the class of particles to which bakari belongs.

Thus, although approximate expressions such as only, nothing but, always, etc. are conventionally given for bakari, it is hard to identify which English forms are used as its equivalents in natural context. No matter how the meaning of bakari is expressed in English, however, as there is no direct lexical equivalent, skewing is unavoidable.

5. Change of semantic scope and skewing: the verbalizing suffix -sugiru

In this section we will examine how changes in the semantic scope of a lexeme in one language cause skewing between the two languages, taking the verbalizing suffix -sugiru as an example. It is an example of rank-shift.

Sugiru as a lexical verb means “to pass” or “to go over the limit”. As a suffix added to verbs or adjectives it expresses excessiveness, which is closely associated with the notion of quantity. By excessiveness, I mean the subjective judgement of a certain quantity to be more than one would
expect. We will examine how its syntactic position skews vis-à-vis the corresponding English expression *too*.

The notion of excessiveness is predominantly expressed by *too* in English. The adverb *too* co-occurs with quantity expressions of all types, as in *too many* and *too few* (bounded entities), *too much* (unbounded entities), *too many times* and *too often* (iterativity or frequency) and *too long* (duration). It also occurs with adjectives and adverbs to denote an excessive degree as in *too expensive* or *too early*.

There is a prefix in English, *over-*, in words such as *overheat* or *overreact*, etc. However, its usage is much more restricted than the suffixation of *-sugiru* in Japanese.

There is an adverb *amarinimo* in Japanese which expresses ‘to an excessive extent’. This roughly corresponds to *too* in English in meaning and in syntactic characteristics. It appears immediately before expressions which denote different quantitative notions such as *ooi* ‘many, much’ as in (30), *yoku* ‘often’ as in (31) and *nagaku* ‘for a long time’ as in (32):

(30) Jiken-wa amarinimo ooi no da.
    cases-TOP too many COP
    ‘There are too many cases.’

(31) Janku-meeru-ga amarinimo yoku kuru node,
    junk-mail-NOM too often COP
    junku-meeru okotowari-no shiiru-o hatta.
    junk-mail HON-refuse-GEN sticker-ACC paste-PAST
    ‘As we got junk mail too often, I put on a sticker saying ‘No junk mail’.”
海外での生活が長かった。

because Japan-LOC returning-although quickly

日本の七日間には慣れてなかった。

'As the time spent overseas was too long, when I returned to Japan I could not get used to the Japanese customs quickly.'

The suffixed verb -sugiru in Japanese is also used frequently to convey the notion of excessiveness. It modifies all types of quantity and degree notions. What is interesting from a syntactic point of view is that, unlike too and amarini(mo), which appear immediately before the expressions they modify, apart from one instance where it is attached to adjectives, -sugiru changes its semantic scope and modifies different parts of a sentence while staying attached to the verb. Martin (1975: 434) points out the wide range of semantic domains -sugiru refers to. He states that with intransitive verbs, -sugiru may imply that a "single subject overdoes the action" or that "too many subjects engage in the action". With transitive verbs he states that "when an object is present, the reference is usually to it". He also points out that "the domain of semantic reference usually includes a predicate adjunct" such as an adverb.

Below we will investigate the different kinds of semantic domains -sugiru refers to. We will also point out that contextual and immediate linguistic context are relevant in the semantic scope of -sugiru. Let us start our examination with cases where -sugiru expresses the excessiveness of frequency and duration.
5.1 Excessive frequency and duration

As was mentioned above, Martin (1975: 434) observes that with intransitive sentences -sugiru may indicate that a "single subject overdoes the action". He does not give any concrete examples of what he means by "overdoing". However, overdoing can be interpreted as doing an action with excessive frequency or over an excessively long duration. Regardless of whether the sentence is intransitive or transitive, when the whole situation is viewed as bounded (perfective), -sugiru implies that the situation occurs with excessive frequency. On the other hand, when the situation is viewed as unbounded (imperfective), -sugiru implies that the situation persists over excessive duration:

(33) Hanako-wa kodomo-o shikari-sugiru.

H.-TOP child-ACC scolding-exceed

'Hanako is always scolding her children.'

(34) Taroo-wa ne-sugita.

T.-TOP sleeping-exceed-PAST.

'Taro slept too long last night.'

In (33), the situation of "Hanako's scolding her children" is interpreted as a bounded situation, and the excessiveness of such a situation is thus interpreted as high frequency. In (34), the situation of "Taro's sleeping" is interpreted as an unbounded situation and the excessiveness of such a situation is thus interpreted as prolonged duration.

The overdoing of the action can sometimes be interpreted in terms of both frequency and duration due to the inherent characteristics of verbs which denote an action that takes time, such as terebi o miru 'to watch television, benkyoo-suru 'to study', joggingu-suru 'to jog', etc:
The action *terebi o miru* ‘watching television’ inherently takes some time in contrast to actions such as “scolding” which could take only a few seconds. Thus in (35), the overdoing of “Taro’s watching television” can be interpreted in terms of the high frequency with which he engages in such an activity as well as the total duration of time Taro spends watching television.

Note, however, if the sentence containing such a verb refers to a particular occasion as in:

(36) *Taroo-wa kinoo-no yoru terebi-o mi-sugita.*

the interpretation can only relate to duration as one does not overdo the action of “watching television” in terms of frequency in a restricted time frame such as “last night”.

Thus, without occurring with expressions which explicitly express frequency and duration as *too* does in English, *-sugiru* implies excessiveness of frequency or duration, while attached to a verb. Different interpretations seem to arise depending on the inherent characteristic of the verb as well as context.
Let us move on to the excessiveness of entities. Martin (1975) discusses the cases where -sugiru refers to an excessive number or amount of entities in two instances. One is when -sugiru is attached to an intransitive verb such as shinu ‘die’ and umareru ‘be born’, which can only happen once in one’s life. He points out that the only interpretation of -sugiru with such verbs is the excessive number of the subjects “too many of them are dying” and “too many are being born”. The second is when -sugiru refers to an object: “When an object is present, the reference is usually to it” (434). Martin gives (37) as an example in which -sugiru is referring to the excessiveness of the direct object biiru ‘beer’:

(37) Biiru-o nomi-sugita.

beer-ACC drinking-exceed-PAST

‘I drank too much beer.’

(38a) below is another example of this kind where -sugiru refers to the excessive amount of jikan ‘time’. In contrast, the semantic association of excessiveness and time is explicitly expressed in the immediate syntactic relationship between too much and time in the original English sentence in (38b):

(38a) Mariino-wa FBI-no shigoto ni jikan-o tori-sugiru.

M.-TOP FBI-GEN work-LOC time-ACC taking-exceed

(38b) He gives too much time to the FBI. (FPF)

In the above examples, while -sugiru is syntactically attached to the verb nomu ‘to drink’ in (37), and toru ‘take’ in (38a), it semantically refers to
the quantity of entities expressed by the direct object *biiru* 'beer' and *jikan* 'time' respectively.

Martin (1975: 434) points out, however, that a sentence such as (37) can have other interpretations as well, i.e. "I did too much/frequent beer drinking" and "Too many people drank beer." While I do not agree with the latter interpretation, I agree that *-sugiru* in (37) can refer to excessive frequency as in "I did too much/frequent beer drinking". Note that the placement of *too much* in different places in English seems to help highlight what is quantified, as in *He drank too much beer* (quantity) vs. *He drank beer too much* (frequency). In the case of *-sugiru* which is always attached to the predicate, however, contextual and immediate linguistic context are relevant in yielding different interpretations. One is the strength of the semantic bonding between what is expressed by the direct object and the verb. When the direct object is thought of as being semantically independent from the verb, *-sugiru* seems to express the excessive quantity of what is denoted by the direct object. In contrast, when the direct object is semantically closely linked with the verb, the direct object and the verb as a whole is thought of as denoting an action and thus *-sugiru* implies high frequency of such actions. Thus *-sugiru* cannot imply excessive quantity of what is expressed by the direct object when it is part of metaphoric phrases such as *hame o hazusu* 'panel-ACC take off (make merry)' or *goma o suru* 'sesame ACC-grind (flatter)', etc.

Another factor which is relevant in yielding different interpretations of *-sugiru* when it appears with transitive verbs is whether the situation refers to a particular occasion or not. If "one's drinking beer" refers to one particular occasion, the frequency interpretation cannot arise. Thus, if we have a phrase such as *ichido ni* 'all at once' in (37)', *-sugiru* can only imply excessiveness of the amount of beer that was drunk and not excessive frequency:
(37) Biiru-o ichido-ni nomi-sugita.
   beer-ACC all at once drinking-exceed-PAST
   'I drank too much beer all at once.'

5.3 Excessive degree of manner (quality of situation)

As Martin points out -sugiru can also modify a manner (quality of situation) adverb:

(39a) Hayaku tsuki-sugita no da (RJG)
   early arriving-exceed-PAST NMLZ COP
   (39b) He had arrived too early. (RJG)

(40a) Ore-ga oogesa-ni kangae-sugiru-tte iu n
   I-NOM exaggeratedly thinking-exceed-QUO say NMLZ COP
   'Lit.: (She) says that I think exaggeratedly.'
(40b) She thought I was overreacting. (CD)

The suffix -sugiru modifies the manner adverb hayaku 'early' in (39a) and oogesani 'exaggeratedly' in (40a).

Interestingly, linguistic context could help interpret -sugiru as expressing excessive degree of manner even if the adverb itself is absent. Look at the following example.
In (41) -sugiru refers to the excessive degree of manner Hanako scolded her children, i.e. something like “severely”. Compare this sentence with the already examined example (33):

(33) Hanako-wa kodomo-o shikari-sugiru.
   H.-TOP child-ACC scolding-exceed
   ‘Hanako is always scolding her children.’

As we have discussed earlier, in (33) the whole situation of “Hanako’s scolding her children” is interpreted as a bounded situation which occurs repeatedly and thus -sugiru is interpreted as indicating excessive frequency. However, in (41) the time word ano toki ‘that time’ clearly indicates that the sentence refers to a particular single occasion, and thus the reading of excessive frequency does not arise.

5.4 Excessive degree of quality of entities

Added to adjectives, the suffix -sugiru expresses an excessive degree of quality:

(42) Risoo to genjitsu-no sa-ga ooki-sugiru. (RJG)
   Ideal and reality-GEN gap-NOM big-exceed
   ‘The gap between ideal and reality is too large.’

(43) Chesapiiku-no keisatsu-ga ... FBI-no kyooryoku-o
    C.-GEN police-NOM FBI-GEN cooperation-ACC
motomeru no-wa mada haya-sugiru. (si)
request NMLZ-TOP still early-exceed

'It is still too early for Chesapeake to be requesting the FBI's assistance.'

This is the only instance where -sugiru semantically modifies what it is formally adjacent to, i.e. the stem of adjectives.

The suffix -sugiru is adjacent to quantity expressions, e.g. ooi 'many, much' and sukunai 'not many, not much'. We examined the existential characteristic of the predicatively used ooi and sukunai in Chapter 6 and 7:

(44a) Kanojo-no koodoo-o setsumei-suru-ni-wa,
she-GEN behaviour-ACC explain-LOC-TOP mada wakaranai koto-ga oo-sugiru. (sk)
still understand-NEG thing-NOM many-exceed

'Lit.: There are still too many things that we don’t know to explain her behaviour.'

'We don’t know enough to explain her behaviour.'

In this section, we have presented a case of rank-shift between the two languages in which forms belonging to different levels of syntactic hierarchy, i.e. an adverb too in English and a verbalizing suffix -sugiru in Japanese, denote frequently expressed semantic notions of excessiveness.

We have pointed out that while the semantic reference of too is formally explicit, since it is adjacent to the element it modifies, what -sugiru modifies is not formally explicit in Japanese but largely implied by the context and immediate linguistic clues. The suffix -sugiru, while attached to verbs and predicative adjectives, changes its semantic scope to
modify different quantity notions, i.e. frequency, duration, number or amount of entities, degree of manner and degree of quality.

6. Almost and various skewed structures in Japanese

We will now examine how the English adverb *almost* shows class-shift and rank-shift with a diverse range of words and structures in Japanese.

Like the notion of excessiveness, the adverb *almost* in English does not itself denote a notion of quantity, but it is strongly associated with quantity notions; it is classified as an adverb, and in *Collins English Dictionary* its meaning is described as “little short of being” or “very nearly”. It modifies quantity notions as in (45) and (46):

(45) *In order to produce strong violet radiation, a temperature of almost 3000 degrees K is required.* (ES)

(46) *Almost half of the polled engineers say they cannot communicate with top management at all.* (ES)

It also modifies concepts other than quantity notions:

(47) *It’s almost like a rifle.* (FPF)

(48) *You almost had a heart attack.* (FPF)

Particularly in the last two examples, the basic semantics of *almost* is expressed by diverse words and syntactic structures in Japanese. The following examples are the corresponding translations of (47) and (48) respectively:
We will first examine instances when *almost* accompanies quantity expressions in 6.1 in order to illustrate class-shift between *almost* and *hotondo*, whose meaning is often considered to be close to *almost* or sometimes *most*. In 6.2 we will examine various instances of rank-shifted structures in Japanese which correspond semantically to *almost* in English when it modifies concepts other than quantity.

6.1 *Almost* modifying quantity notions, and *hotondo*

a. Near total quantity of entities

First, by focusing our examination on examples which express the near total quantity of entities, we will illustrate the adverb-like characteristics of *almost* compared to the dual syntactic characteristics of *hotondo*.

*Almost* appears with quantity expressions such as *all* to express approximation to a total amount:

(51) *Taro* ate *almost* all the spinach.
Similarly, *hotondo* may appear with a quantifier denoting total amount and together they express near total quantity of entities:

(52) *Taro*-wa *hoorensoo*-o *hotondo* *zenbu* *tabeta*.

T.-TOP spinach-ACC almost all eat-PAST

'Taro has eaten almost all the spinach.'

Kenkyuusha’s *New Japanese-English Dictionary* gives English expressions such as *almost*, *about* and *the greater part [of]* as equivalents of *hotondo*. In (51) and (52), in terms of syntax and meaning, *hotondo* certainly corresponds to *almost*.

*Hotondo* can move around with quantifiers. In (52) *hotondo* occurs with *zenbu*, which occurs outside the noun phrase it quantifies. As we have seen in Chapter 4, Japanese quantifiers appear in different syntactic positions. *Hotondo* can also accompany a quantity expression in a pre-nominal position as in (53) or a quantity expression which forms an NP head as in (54):

(53) *Hotondo* *zenbu*-no *gakusei*-wa *nihon*-ni *itta*

almost all-GEN student-TOP Japan-LOC went

*keiken*-ga *aru*.

experience-NOM exist

'Most of the students have been to Japan.'

(54) *Gakusei*-no *hotondo* *zenbu*-ga *nihon*-ni *itta*

student-GEN almost all-NOM Japan-LOC went

*keiken*-ga *aru*.

experience-NOM exist

'Most of the students have been to Japan.'
Thus, apart from the difference in the quantifier position between the two languages, in the examples shown above, the semantic and syntactic relationship of *almost* in relation to *all* seems to correspond to that of *hotondo* to *zenbu* ‘all’.

However, near total quantity is also expressed by *hotondo* alone:

(52') *Taro-wa hoorensoo-o hotondo tabeta.*

T.-TOP spinach-ACC most eat-PAST

‘Taro has eaten most of the spinach.’

In (52’) *hotondo* appears NP-externally by itself and still conveys the same meaning expressed by *hotondo zenbu* in (52). In (52’) *hotondo* acts like a quantifier in the same way as quantifiers such as *hanbun* ‘half’ and *sanbun-no-ichi* ‘one third’ do. Syntactically, *hotondo* on its own appears in all of the quantifier positions, i.e NP-externally as in (55), in a pre-nominal position as in (56) and as a head of a noun phrase itself as in (57) below:

(55) *Joojia-no nan-bu-wa hotondo koozui de*

Georgia-GEN southern-part-TOP most of it flood-INSTR

*nagas-arete-shimatta. (sk)*

wash-PASS-complete

‘Most of the southern part of Georgia was washed away by the flood.’

(56) *Hotondo-no baai-wa sore-wa kanzen-na shinjitsu de-*

most-GEN case-TOP that-TOP complete truth COP-
wa nak-atta. (sk)
TOP NEG-PAST
‘In most of the cases that was not a true story.’

(57) Sono yonbun-no-ichi-wa satsujin-no higaisha de,
that four-GEN-one-TOP murder-GEN victim COP
hotondo-wa namae-ga wakar-azu-jimai da. (sk)
most-TOP name-NOM know-NEG-end COP
‘A quarter are murder victims and the names of most of them
are never known.’

Thus in examples such as (55), (56) and (57) above, hotondo demonstrates
full quantifier characteristics, both semantically and syntactically.

If hotondo by itself can convey the meaning of almost all, then why
does it co-occur with quantifiers? There seem to be two reasons. One is
when the quantifier denotes partial quantity as in hotondo hanbun
‘almost half’, hotondo san-bun-no-ichi ‘almost one third’ and hotondo
go-nin ni hitori ‘almost one in five people’:

(58) Gijutsusha-no hotondo hansuu-ga, keiei
engineer-GEN almost half-number-NOM, management
toppu to taiwasuru koto-wa mattaku deki-nai,
top with communicate NMLZ-TOP at all do(POT)-NEG
to itte-iru. (ES)
QUO saying-is
‘Almost half of the engineers are saying that they cannot
communicate with top management at all.’
In these cases, partial amounts such as *hansuu* ‘half-number’ serve as a reference point, and *hotondo* expresses approximate amount to such a point. Without its presence, *hotondo* would mean “almost all the engineers”.

The other reason for *hotondo* to occur with quantifiers, as in *hotondo zenbu* ‘almost all’, is to *emphasise* the near totality. Let us consider the relationship between the implied notion of totality and its explicit mention. Often expressions of totality do not need to be present in a sentence to imply totality of the entity affected. Look at the following examples:

(59) *Taro*-wa *hoorensoo* mo *zenbu* *tabeta*.

T.-TOP spinach also all eat-PAST

Taro ate all the spinach as well.’

(59)’ *Taro*-wa *hoorensoo* mo *tabeta*.

T.-TOP spinach also eat-PAST

‘Taro ate the spinach as well.’

Both (59) and (59)’ could refer to the same event. In (59), the totality of the spinach is *explicitly* mentioned by the quantifier *zenbu* ‘all’, while in (59)’ the consumption of all the spinach is assumed from the context. We can apply this observation to the difference between *hotondo* and *hotondo zenbu*: in *hotondo zenbu*, *zenbu* is explicitly conveying the totality of the quantity of an entity, but its presence is optional.

Thus, *hotondo* appears with quantity expressions either when the total amount cannot be implied by the context, as in the case of *hotondo hansuu* ‘almost half’, or when the notion of totality has to be emphasised, as in the case of *hotondo zenbu* ‘almost all’.
Having examined the occurrence of *almost* and *hotondo* so far, we can say that *almost* is an adverb which occurs with quantity expressions and denotes approximation. *Hotondo*, on the other hand, has dual syntactic characteristics, i.e. lexically it corresponds to the adverb *almost* when it occurs with quantifiers and it corresponds to a quantifier such as *most* when it occurs by itself.

**b. Near nil quantity of entities**

Near nil quantity can also be expressed by *almost* in English:

(60) Now it is eight o'clock and there are almost no customers
     (in the shop).

As with total quantity, *almost* seems to denote the notion of approximation to quantity in (60), in this case nil quantity expressed by the quantifier *no*.

In Japanese, near nil quantity of entities is also expressed by *hotondo* and a negative predicate:

(61) *Ima hachi-ji na node, hotondo*
     now eight-o'clock COP because, most
     *kyaku mo i-nai.* (I)
     customer also exist-NEG

One may ask how we can explain cases where *hotondo* occurs with *nanimo*, which at a first glance resembles the relation of *almost nothing*: 
(62) Kanja-wa hotondo nanimo tabe-nak-atta. (K)
patient-TOP most nothing eat-NEG-PAST
'The patients ate almost nothing.'

We can explain the co-occurrence of hotondo and nanimo in the same way as we explained the co-occurrence of hotondo and a quantity expression such as zenbu. Considering the fact that hotondo can also occur without nanimo as in (63):

(63) Kanja-wa hotondo tabe-nak-atta. (K)
patient-TOP most eat-NEG-PAST
'The patients ate almost nothing.'

it is plausible to consider that hotondo is not semantically dependent on nanimo. The presence of nanimo seems to only be emphasising the nilness, just in the same way zenbu emphasises totality when it appears with hotondo.

In passing, it is worth mentioning that hotondo does not appear with numerical quantifiers as freely as almost. As mentioned earlier, almost can be used to modify exact numbers in English. In Japanese, instead of hotondo, numerical quantifiers are followed by chikai ‘close’. This either modifies the following noun in its attributive form chikai, or appears adverbially in the adverbial form chikaku:

(64a) In order to produce strong violet radiation, a temperature of almost 3000 degrees K is required. (ES)

(64b) Murasaki-no tsuyoi hooshasen-o hasseis-aseru-ni - purple-GEN strong radiation-ACC produce-CAUS-LOC-
Chikai ‘close’ also accompanies frequency and duration expressions when they contain numerical quantifiers, as we will see below.

c. Frequency and duration

How does the notion of totality translate into frequency and duration? Let us think of total frequency as the frequency with which “a situation takes place on all occasions when that situation can take place” and total duration as “the total extension of a certain period of time”. Both English and Japanese have adverbial and numerical expressions to convey these kind of notions.

With our observations of the difference between almost and hotondo in mind, let us examine how these expressions are used in relation to near total and near nil frequency and duration.

Both almost and hotondo occur with frequency expressions which denote totality, such as always and all the time in English and itsumo ‘always’ in Japanese.

(65a) He almost always arrives on time.

(65b) Kare-wa hotondo itsumo jikan doori-ni kuru.

In (65b) hotondo looks as if it modifies the meaning of itsumo in the same way as almost modifies always in (65a). However, although almost
does not appear by itself syntactically, *hotondo* can appear without *itsumo* and still express near total frequency.

(66) Sasou no-wa *hotondo* watashi-no invite NMLZ-TOP most of the time I-GEN

*hoo* *kara* datta. (I)
direction from COP-PAST

'Invitations to go out together came from me in most cases.'

How is it possible for *hotondo* to express near total frequency without occurring with *itsumo* 'always'? Again, in terms of our earlier observations where we noted that the notion of totality does not have to be explicitly represented, total frequency can be implied without the explicit use of an adverb such as *itsumo* 'always':

(67) Sasou no-wa watashi-no *hoo* *kara* invite NMLZ-TOP I-GEN direction from
datta.
COP-PAST

'Invitations to go out together (always) came from me.'

The example above means that "in all situations when an invitation was made to go out together, I made such an invitation". This is why *hotondo* can appear by itself inferring near total frequency, just as *hotondo* expressed near total amount of an entity.

Frequency expressions such as *mainichi* 'everyday' also denote total frequency, i.e. "once per day" and such expressions can co-occur with *hotondo*. 

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(68a) *I go to university almost everyday.*

(68b) *Hotondo mainichi daigaku-ni itte-imasu.*

almost everyday university-LOC going-is

'I go to university almost every day.'

However, without these expressions, *hotondo* by itself is enough to yield appropriate interpretations of high frequency according to what kind of total frequency is indicated in the context, such as “almost every time invitations were made to go out together” or “almost every day of the week”. The notion of totality is induced from the rest of the context.

Syntactically, it is difficult to label *hotondo* as an adverb of frequency as it clearly retains its nounhood just like quantifiers. Thus we will only go as far as to explain that in an instance like (66), the basic quantitative value of *hotondo* is interpreted in terms of frequency, resulting in the meaning “most of the time” or “almost always”.

The different characteristics of *almost* and *hotondo* which we observed involving quantity of entities is also transferred to that of near nil frequency. *Almost* occurs adverbially with the frequency adverb which denotes nil frequency, *never*:

(69a) *She had her own private modem and the dial-in is the number of a diagnostics line almost never used.* (FPF)

In the Japanese translation *hotondo* occurs by itself with a negative predicate:

(69b) *Kanojo-wa jibun-no modemu-o kakushite-oita.*

she-TOP self-GEN modem-ACC hiding-placed
De, hotondo tsukaw-areru koto no nai
and most of the time use-PASS NMLZ COP exist-NEG
shindan-yoo-no kainen-no bangoo-de
diagnosis-use-GEN line-GEN number-INST
daiyaru-in-shite-ita wake. (sk)
dial-in-doing-was reason

Thus, in frequency sentences, not only does hotondo convey a quantitative value paralleling the one used with entities, but it also retains the similar syntactic characteristic of occurring independently.

As with numerical quantifiers denoting quantity of entities, when a frequency expression contains an exact number, chikai is used in Japanese while almost is used in English:

(70a) John has been to Japan almost twenty times.
(70b) Jon-wa nijuk-kai chikaku nihon-ni itte-iru. (I)
John-TOP twenty-times close Japan-LOC going-is

Let us turn to duration expressions. Total duration is explicitly conveyed by expressions such as all day, and throughout the night in English, and by zutto ‘all through the time’ and a suffix -juu which is attached to a duration expression to mean “throughout the period” as in ichi-nen-juu ‘all through the year’ in Japanese. Almost and hotondo occur with such duration expressions.

(71a) Sophi’s father was the captain of a big oil tanker, and was away for most of the year (or almost all the year). (sw)
(71b) [Sofii-no chichi-oya-wa] seiku-tankaa-no senchoo de,
S.-GEN father-TOP oil tanker-GEN captain COP
hotondo ichi-nen-juu uchi-o rusu-ni shite-iru. (ss)  
amost one year through home-ACC absence doing-is

Again, hotondo can appear here without a duration expression and still expresses “most of a certain period”.

(72) Kyoo-wa hotondo uchi-ni imasu.
today-TOP almost home-LOC exist
‘I will be home almost all day today.’

Even though the total duration is not explicitly expressed in (72), hotondo is interpreted as duration by the linguistic context, i.e. kyoo ‘today’ and the predicate imasu.

Note that when total duration is expressed by numerical quantifiers, such as nihyaku-nen ‘two hundred years’, hotondo is not used in Japanese but the numerical quantifier is accompanied by the adjective chikai ‘close’:

(73a) It withstood almost two centuries of war and bad weather.
(FPF)

(73b) Asoko-wa nihyaku-nen chikai aida,  
that place-TOP two hundred-year close period  
sensoo to aku-tenkoo-ni taete-kita. (sk)  
war and bad weather-DAT withstanding-came

Regarding near nil duration, hotondo expresses near nil duration by again occurring with a negative predicate:
(74) *Kyoo-wa hotondo uchi-ni i-nai.*

today-TOP almost home-LOC exist-NEG

'I won’t be home much at all today.'

There is no duration adverb in English which specifically expresses nil duration. However, *almost* modifies a durational notion of this kind in *almost no time*, etc.

Summing up the examination above, the semantic and syntactic characteristics of *almost* and *hotondo*, which we primarily observed in their occurrence with quantity of entities, transfer when they appear with frequency and duration notions.

In 6.1 we have shown that *almost* and *hotondo* are skewed because *hotondo* itself class-shifts from a quantifier to something which co-occurs with quantifiers in Japanese.

### 6.2 *Almost* modifying notions other than quantity of entities and situations

Below we examine cases where *almost* occurs with notions other than quantity in English and how these are expressed in Japanese. These cases involve more prominent skewing between English and Japanese.

Firstly, in English, *almost* occurs with adjectives and adverbs which describe a certain quality or manner.

(75) *I have had patients over the years who were almost not of this world.* (FPF)

(76) *'I think I’ll go upstairs and do my biology homework,' she said, almost apologetically.* (sw)
In such sentences, *almost* does not express approximation to an extreme degree of the state of "not of this world" or the manner of "apologetically" but approximation to what can be described or qualified as being "not of this world" or "apologetically". (75) describes a person's mental state which is close to a range of characteristics which is thought of as being "not of this world". (76) describes a manner in which someone said something, which is close to being thought of as "apologetically".

*Almost* can also occur with nouns, often with *like*.

(77) *It's almost like a rifle.* (FPF)

This means that the weapon has characteristics so close to those of rifles that it could be classified as a "rifle".

Furthermore, a whole proposition can be modified by *almost* in the same manner.

(78) *You almost had a heart attack.* (FPF)

(79) *I almost could not blame them.* (FPF)

(80) *The pistol on the belt almost touching my ear,* (FPF)

(78) means that the characteristics of the situation were close to what is thought of as "having a heart attack". Similarly in (79) and (80) the characteristics of the situation were extremely close to what is thought of as "not being able to blame" and "touching the ear" respectively.

Thus the basic meaning of approximation is still present in *almost* when it occurs with notions other than quantitative ones. Japanese, on the other hand, has particularly diverse ways of conveying what is simply expressed by *almost* in the above English examples. *Almost not of this*
world in (75) and almost apologetically in (76) are expressed in the Japanese translations with the expressions *yoo-na* ‘like/ of similar characteristics’ in (81) and *yoo ni* ‘like/ in a similar fashion’ (82):

(81) Kore made *hotondo* *ningen* to-*wa*

this until by almost human being QUO-TOP
omo-e-nai *yoo-na* kanja-ni nan-nin-ka
think-POT-NEG like patient-DAT a few-CL
deat-ta koto-*ga* aru kedo. (sk)
encounter-PAST NMLZ-NOM exist but
‘Lit.: Up until now, I have come across several patients who hardly appeared human.’

(82) ... Sofii-*wa* nandaka *jibun-ni* iiwake-*o* suru
S.-TOP somehow self-DAT excuse-ACC do
*yoo-ni*, koe-*ni* dashite *itta*. (ss)
like voice-LOC projecting said
‘She said it out loud as if to apologise to herself.’

Note that *hotondo* in (81) is emphasising the sense of approximation and is semantically and grammatically optional.

Instead of *yoo na*, expressions such as *to ittemo ii kurai* ‘extent that it is appropriate to say ...’ may also be used to express the meaning of *almost* in (83):

(83)Ningen to-*wa* omo-e-nai
human being QUO-TOP think-POT-NEG
to *it-temo ii* kurai *na* kanja
QUO say-if okay extent COP patient
‘Patients who are of the extent that it is appropriate to say that we cannot think of them as human beings.’

Almost like a rifle in (77) is expressed in the Japanese translation with *mitai da* which, like *yoo-na* in the earlier example, expresses ‘be of similar characteristics’ or ‘something like’:

(84) *Marude raifuru mitai da.* (sk)  

as if rifle something like COP

‘It is rifle-like.’

In examples in which approximation to a particular situation such as ‘you almost having a heart attack’ in (78), ‘I almost not being able to blame them’ in (79) and ‘the pistol almost touching my ear’ in (80) a range of structures are used in the translation:

(85) *Moo sukoshi de shinzoo-hossa-o okosu tokoro datta.* ja nai no. (sk)  

COP-PAST COP-NEG NMLZ

‘Lit.: With a little more, it was on the point of you having a heart attack.’

(86) *Sore-o seme-rare-nai yoo-na ki-ga shita.* (sk)  

that ACC blame-POT-NEG like feeling-NOM did

‘Lit.: I felt as if I was not able to blame that.’

(87) *Beruto-no pisutoru-ga mimi-ni fure-soo*  

belt-GEN pistol-NOM ear-LOC touch-like
datta. (sk)

COP-PAST

'Lit.: The pistol on the belt was just about to touch my ear.'

In English, closeness to a certain aspectual point in time when an event occurs or is achieved can also be expressed by a primarily spatial deictic expression such as close. The following conversation uses almost as well as close to denote the same semantic force.

(88) 'I almost shot Lucy tonight.' I looked into her eyes.

'Tell me how that happened?'

I told her.

'But you did not fire the gun?'

'I came close.'

'No bullets were fired?'

'No,' I said

'Then you did not come so close.' (FPF)

There are still other expressions in Japanese which can describe the semantics carried by almost. In English too, other words and structures are used, such as nearly, close and on the point of. However, this section has presented ample evidence of the extent of diverse skewing between the two languages, i.e. what is typically simply expressed by one word in one language can be expressed by diverse ways in the other.
7. The notion of comparison and the space vs. time division

Lastly we will present a case of skewing where the meaning conveyed by a comparative form in English is expressed by a temporally projected notion of "increase" in Japanese.

In the following examples the English comparative quantifier more skews with the verb fueru ‘increase’ in Japanese:

(89a) *More and more* people argue in favor of a mechanistic view of nature. (sw)

(89b) *Yuibutsuron-de shizen-o rikaisuru hito-ga* materialism INSTR nature-ACC understand person-NOM *dondon fuete-ita.* (ss)

'a lot increasing-was

‘Lit. The people who understood nature using materialism continued to increase rapidly.’

Also compare the comparative form of the adjective larger in the American newspaper article below and its natural translation into Japanese:

(90a) They [American leaders] hold, too, that a larger Japanese defence effort will dull Japan’s commercial and competitive edge. (JC)

(90b) *Karera-wa, nihon-no booei doryoku-ga fuer-eba, they-TOP Japan-GEM defence effort-NOM increase-if keizaimen-de-no kyoosooruyoku#ga commercial-aspect-LOC-GEN competitive edge-NOM donkasuru daroo to mo kangaete-iru.* (jc)

deteriorate will QUO also thinking-is
‘Lit.: They also think that if Japanese defence effort increases, its commercial and competitive edge will become dull.’

Below we will explain why such skewing takes place. When we talk about comparison, discussion usually centres on comparison at the same temporal point, such as *John has more children than Mary*, *Mary is more intelligent than John*, etc. In such instances, the comparison of the number of children or the comparison of intelligence of two entities, John and Mary, is given at the same time. However, we can also compare a certain quantity or quality associated with an entity at one point in time with that of the same entity at a different point in time. Comparison over time is more naturally thought of as “change”, and both English and Japanese may express such notions by predicates which denote change or process (such as English *grow*, *become*, *increase*, etc.). However, English also expresses such changes by the comparative forms of quantifiers and adjectives along with time.

(91) *John has two more children than five years ago.*
(92) *More people work from home these days.*
(93) *I am better at cooking than before.*

In Japanese, on the other hand, comparison over time is generally expressed by verbs which denote change-of-state. The following are the equivalents of the above three examples in English:

(94) *Jon-wa go-nen mae yori kodomo-ga*

John-TOP five-years before than child-NOM
two increased

‘As for John, the number of his children increased by two compared to five years ago.’

(95) Saikin uchi-de hataraku hito-ga fueta.
recently home-LOC work people-NOM increased
‘Recently the number of people who work at home has increased.’

(96) Mae yori ryoori-ga joozu-ni natta.
before than cooking-NOM skilful became
‘I have become better at cooking than before.’

The process verbs *fueta* in (94) and (95) and *natta* ‘become’ in (96) explicitly denote changes. In the English examples, although a shift in time is indicated by adverbial phrases such as *five years ago, these days* and *before*, the predicate *has* in (91), *work* in (92) and *am* in (93) do not indicate any notion of process at all. Thus the comparison over time can be expressed by a quantifier in comparative form in English while such meaning is expressed by a verb denoting change in Japanese. This is a case of class-shift.

8. Summary

In this chapter, we have presented a range of cases of rank-shift and class-shift between English and Japanese in a number of words and structures related to Quantity. Although many more issues could have been selected and investigated, and although all the issues presented in this chapter deserve a much more thorough examination, I believe that the
way we examined each issue has demonstrated how the notions and the
approach developed in this study can be successfully applied to the
description and semantic explanation of discrepancies in the formal
representation of different packaging of meaning between the two
languages.

Introduction

This study has investigated how English and Japanese, two genetically
unrelated and typologically distinct languages, phrase semantic roles
at different levels and categories of language, focusing especially on cases
of quantification. The notion of category with (quantifiable) and without
(Counted) was used whose applicability is tied to the systematic comparision
of underlying semantic and development.

The focus of syntactic analysis is essential in order to establish
the quantity, and the basis relevant semantic units over which
divisions of meaning are to be examined, such as: the semantic
definitions of: indefiniteness vs. definiteness and specificity vs.
non-specificity and how they interact with the contrasting relationships between "space vs. time"

These primarily space-related semantic notions are typically
expressed in the noun phrase in English and their representation is
generally considered to be lacking in Japanese. However, the study
revealed that in an absent limit our examination to the corresponding
class, can be done that we can show how these notions are also
expressed in and the discussions relevant in Japanese as well. Furthermore, this
study suggests a new dimension of shift which is relevant in comparing
 typologically distinct languages, motivation-shide, which is a shift
between grammatical vs. lexical representation and semantic and
pragmatically enforced representation.

In Section 2 we will summarise the framework following which we
investigate using the notions of categoriality. In Section 3 we will
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Conclusion

1. Introduction

This study has investigated how English and Japanese, two genetically unrelated and typologically distinct languages, package meaning across different levels and categories of language, focusing examination on cases of quantification. The notions of category-shift (Halliday) and level-shift (Catford) were used where appropriate to aid the systematic comparison of underlying semantic equivalence.

The cases of syntactic skewing we examined concerned expressions of quantification, and the basic relevant semantic notions were the divisions of boundedness vs. unboundedness, singularity vs. plurality, definiteness vs. indefiniteness and specificity vs. non-specificity and how they interact with the contrasting dimensions between space vs. time.

These primarily space-oriented semantic notions are typically expressed in the noun phrase in English, and their representation is generally considered to be lacking in Japanese. However, the study revealed that, if we do not limit our examination to the corresponding class, rank or level, then we can show how these notions are also expressed and are thus relevant in Japanese as well. Furthermore, this study suggests a new dimension of shift which is relevant in comparing typologically distinct languages, motivation-shift, which is a shift between grammatically enforced representation and semantically and pragmatically enforced representation.

In Section 2 we will summarise the instances of skewing which we examined using the notions of category-shift. In Section 3 we will
summarise skewing instances which involved level-shift, a shift between the levels of grammar and lexis. In Section 4, we will argue for a new dimension of shift: "motivation-shift". Section 5 will discuss inadequacies of the framework of comparison adopted in this study, and will be followed by a concluding section.

2. Category-shift

Let us first summarise the instances of skewing investigated in this study from the point of view of category-shift. As anticipated from the typological differences between the two languages, types of category-shifts such as structure-shift (shift of word order) and intra-system-shift (shift between alternatives of a certain grammatical category) were not relevant. However, along with the notion of class-shift, as Catford notes, the notion of rank-shift was very useful in describing very opaque discrepancies. With such concepts we were able to compare the complex skewing involved in the existential sentences in the two languages in Chapters 6 and 7. We pointed out that a so-called existential quantifier in English, a single pre-nominal element, is class-shifted into a quantifier and an existential verb in Japanese, while at the same time the predicate in the simple predicate sentence in English is rank-shifted to a predicate in a relative clause in Japanese. Thus, it is only when we examine the surface forms in the light of skewing involving class-shifts as well as rank-shifts that we realise with conviction that there is semantic equivalence between such diverse surface structures.

Regarding the existential sentence, we also showed how the quantitative value is transferred from a spatially-oriented notion such as "number" to temporally-oriented notions such as "frequency", resulting in the class-shift between spatially-oriented quantity expressions such as many to temporally-oriented frequency adverbs such as often. We have
also attributed such a common phenomenon partly to the semantics of existential sentences which also bear temporal orientation.

The concept of category-shift also enabled us to extend our observations to the temporal dimension when we investigated quantification of situations expressed in the existential sentence in Japanese in Chapter 7. We showed that Pred-Nonpast koto ga aru and Pred-Past koto ga aru constructions are examples in which situations are expressed in a nominalised clause. We pointed out that they semantically correspond to the habitual and the experiential perfect in English respectively, and argued that they present a major case of skewing. Parallelism was pointed out between the indefiniteness of entities expressed in the existential construction and that of situations expressed in these Japanese koto ga aru constructions. This provided evidence for the widely accepted understanding that habitual and experiential perfect aspects concern situations which are indefinite.

The parallel between spatial and temporal interpretations of quantity notions was also discussed in minor cases of skewing in Chapter 10 in relation to the characteristics of hotondo and bakari, and the contrast between superlative adjectives in English and verbs denoting change of state in Japanese.

Regarding anaphoric expressions which concern the semantic domain of definiteness, the notion of skewing enabled us to see the underlying pragmatic equivalence between pronouns in English and their syntactically skewed counterparts in Japanese. In Chapter 9, we argued that quantifiers are used as anaphoric expressions, not only when they occur as head nouns, which correspond to English pronoun position, but also when they occur NP-externally as well as in combination with an NP head. We pointed out that quantifiers have
Chapter 11

enough information relating to the characteristics of entities to help recover the reference of the elided element.

3. Level-shift

The notion of level-shift—a dimension of shift between the levels of grammar and lexis proposed by Catford in addition to the notion of category-shift—enabled us to compare how some semantic notions are marked grammatically in English while they are often expressed lexically by quantity expressions in Japanese, although not in binary contrasts in the latter.

Japanese certainly lacks grammatical categories such as the count vs. mass noun opposition, singular vs. plural number, and definite and indefinite articles, which respectively represent the semantic divisions of boundedness vs. unboundedness, singularity vs. plurality and definiteness vs. indefiniteness. However, this does not mean Japanese cannot convey these notions. Chapter 8 and 9 argued for this claim. It was shown in Chapter 8 that representation of the division of boundedness and unboundedness is highly grammaticalised and expressed within the noun phrase in English, such as by way of the categorisation of count vs. mass noun, the absence or presence of classifiers in quantifiers and the different syntactic positions of the quantifiers. In Japanese, on the other hand, the division is only expressed through the meaning of classifiers in a numerical quantifier, which sensitively reflect whether the referent is conceptualised as bounded or unbounded. In Chapter 9 we examined how quantifiers in Japanese can serve to express plurality of entities but only when motivated by semantic and pragmatic needs.

It is not surprising to observe that in Japanese quantity expressions, numerical quantity expressions in particular, function to express some of
these basic notions because they are closely associated with entities even while they often occur outside the noun phrase. The numeral explicitly denotes the singularity or plurality of the referent, while the classifier encodes semantic information about the entity, such as whether it is bounded or unbounded as well as other categorical characteristics. Furthermore, when both of them are combined they have enough information relating to the characteristics of entities to recover the reference of the elided element and therefore act as anaphoric expressions.

4. New dimension of shift: motivation-shift

The findings suggest the need to add a new dimension of shift to the existing framework when comparing typologically distinct languages; "motivation-shift". This refers to a shift between different types of motivation which trigger formal representation. Both category-shift and level-shift are useful in comparing formal discrepancies systematically. However, these notions of shift assume formal representations to be present for comparison. But, as we have seen in this study, it is also necessary to take into consideration the different reasons which motivate the formal representation of certain semantic notions. We have observed cases where Japanese reflects some of these notions when there is a semantic or pragmatic need to express them. This differs from the grammatically enforced coding of certain notions in English. For example, Chapter 9 showed that generally plural marking in Japanese is only required when such marking is necessary to maintain sentential and contextual coherence. It was pointed out that quantifiers are used to express the number explicitly when it is necessary to block the singular reading or collective or generic reading of the referent, or to maintain sentential cohesion and contextual coherence.
5. Inadequacies of the framework

Halliday and Catford's notions of shifts were useful in comparing the two languages in certain instances as they broaden the dimensions of comparison. However, as Catford has noted, comparison between languages using notions of shift assume that the languages to be compared have to share a certain degree of formal correspondence. We concur, finding limitations because of the extent of the differences between English and Japanese.

For instance, Chapter 5 dealt with cases where semantic domains were expressed by different syntactic positions in one language. It was argued that, although not expressed as elements within the noun phrase as in English nor as opposing forms, semantic domains such as indefiniteness and specificity are reflected in Japanese syntactically by means of the position of quantity expressions. We showed that when quantity expressions occur outside the noun phrase, the quantified entities are always indefinite (and can be either specific or non-specific), while when they occur pre-nominally the quantified entities are specific (and can be either definite or indefinite). The semantics of the pre-nominal and NP-external constructions argued in this chapter clarified why both constructions sometimes become synonymous, i.e. when the entities are specific/indefinite. Furthermore, our hypothesis that non-specific entities can only be expressed by the NP-external construction also proved relevant in accounting for the anomalies of rules surrounding the NP-external positioning of quantifiers occurring with noun phrases other than in nominative and accusative cases.

It was also problematic when a whole word class is absent in one of the languages. For example, it was difficult to describe the skewing which involved the particle bakari, since there is no word class in English which corresponds to the class of particles to which bakari belongs.
The most fundamental problem concerns the word class and syntactic behaviours of quantity expressions themselves. In English they predominantly occur as pre-nominal elements within the noun phrase while in Japanese they can be syntactically linked to a head noun or can be a sentential element. We used class-shift to describe the skewing between the pre-nominal quantifier in English and the NP-external quantifier in Japanese when describing the skewing in existential sentences. However, some doubts may be raised as to whether the concept was applied adequately in such a description.

There were instances of skewing which cannot be described within the suggested framework. However, even if we cannot apply the notions exactly in the fashion they are prescribed, the basic idea of skewing—that packaging of meaning occurs across levels (grammar and lexis) as well as categories (class and ranks)—broadens the dimension of examining the semantic equivalence between two diverse languages such as English and Japanese. Although the notion of syntactic skewing is only relevant within the sentential level, it is a useful notion in fields which deal with transfer of meaning. This is because an awareness of its existence can prompt a translator or a learner of a second language to look for an equivalent in the other language which is not only grammatical but also natural. The theory can also assist in the examination of formal discrepancies, which is something that may not be offered by other methods.

6. Semantic notions and formal representation

We now return to evaluate the claim made by Jakobson that “all cognitive experience and its classification is conveyable in any existing language”. The examination carried out in this study is quite restricted and it is by no means conclusive. However, based on the findings, we can
say that such a claim is highly plausible provided that we are prepared to compare formal representations which are motivated not only grammatically but also semantically and pragmatically, and provided that we do not restrict our comparison of languages to looking for one-to-one correspondences of sentential elements. This type of approach is beneficial and necessary if we are to understand the full expressive force with which languages are endowed.
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