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Translation and Understanding:
Mental Models as an Interface in the Process of Translation

Atsuko Kikuchi

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ABSTRACT

This thesis discusses two characteristics of language which affect translation, using English and Japanese examples. However, the general points made in the thesis are not specific to these two languages.

One characteristic of language is that it encodes particular perceptions of experience by its users. Word meaning is defined in this thesis in terms of the typical experience the language user associates with a word. Concepts for which there are no single lexical items are encoded by putting together words which the speaker thinks best characterise the concept. This particular characterisation of a concept may become established in the language community. If the members of a language community form a habit of characterising a concept in a particular way, it may become difficult to perceive the concept in any other way. In translation, this may lead the translator to impose characterisations established in her own language on the other language.

However, such difficulties can be overcome because of the creative capacity of people everywhere to learn new ways to perceive the world. And language provides the mechanism to encode such novel perception. This is the other characteristic of language discussed in this thesis. We can use an existing word to encode a new kind of experience which we perceive as having some connection with the kind of experience associated with the word. Such novel application of a word can be understood because upon hearing the word, the typical experience associated with the word is evoked in the hearer’s mind, and using her knowledge, the hearer constructs a mental model which she thinks best accounts for the combination of experiences evoked in her mind by the linguistic forms.

Defining word meaning and sentence meaning in terms of mental images allows us to understand the process of translation: Upon hearing/reading the source language text, the translator constructs a mental model based on the text. She then bases her translation on this mental model, which becomes a rich source of information. Because the translator is not moving directly from one language to the other, no direct correspondences between the linguistic forms of the two languages need to be sought. This also explains why it is relatively easy to translate between two languages whose users share similar experiences and therefore can build similar mental models, even if the languages are typologically very different from each other.
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Finally, I wish to dedicate this thesis to my father, Kiyoaki Kikuchi.
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1. INTRODUCTION

Translation has been an object of study by scholars of literature, by translators, philosophers, and linguists for a very long time. Traditional studies of translation have focused on literary translation and on ways in which great works of art can be translated (cf. Selver 1966, Lefevere 1975, and Belitt 1978). In the 1950s when machine translation appeared a possibility, the trend in translation studies shifted from dealing with literary texts to non-literary, pragmatic texts. There was a call for a scientific approach to translation (Nida 1964), and linguistically oriented theories of translation appeared (Catford 1965, Nida and Taber 1969). Within the linguistic approach to translation, there have also been studies of contrastive lexicography (Larson 1984, Kunihira 1981), development of Immediate Constituent Analysis to determine the meaningful units to translate (Hockett 1954, Voegelin 1954), and theories of translation equivalence (Nida 1964).

This thesis also follows the linguistic approach to translation whereby translation is regarded as expressing in a language what is expressed in another language, and the objective of translation theory is to describe how this is achieved. The person who is referred to as 'the translator' in this thesis is assumed to be a bilingual speaker of the source language (SL) and the target language (TL).

Although this thesis deals with translation between English
and Japanese, the general points made here are not specific to translation between these two languages and are applicable to any language.

How we view translation can vary a great deal depending on how we view language. If we regard language to be a collection of words and sentences which are realisations of a fixed set of objective meanings, then we may think of the process of translation as merely a code-switching process where the words of the SL are separated from their meanings, and then the meanings are re-encoded into another set of words and sentences in the TL. In this view of language, the discussion of translation will be largely focused on comparisons of the sets of words and sentences in the SL and the TL. The SL text and the TL text will be compared as if the link between the SL and the TL which makes translation possible lay simply in the words.

Katz (1978) views language as a collection of words and sentences which are realisations of universal logical propositions and identifies these propositions as the link between the SL and the TL. Following Chomsky (1966a), Katz (1978) assumes there is nothing that is genuinely new in this world and what the mind thinks is merely a birth into conscious awareness of a fixed stock of ideas which is present in the unconscious of every human being in its potential form. The task of linguistics, according to Chomsky (1966b:12), is to 'provide a general, language-independent means of representing signals and semantic interpretations that are interrelated by
grammars of particular languages'.

The above quote suggests that the process of translation consists in separating the language-independent semantic interpretations from the words and sentences in the SL and then re-encoding them into another set of words and sentences in the TL. This view, of course, sees no fundamental difficulty in translation. Chomsky (1966a:96 n.63) writes that since various languages each encode the same universal concepts, 'there should be no fundamental difficulty in translation from one language to another'. Universalists like Chomsky believe in a limited set of thoughts which all languages draw on (though the linguistic signs to represent some of the thoughts may not yet exist) and beyond which no human being can go.¹

If, on the other hand, one assumes that there is not necessarily a link between the SL and the TL, one ends up with the extreme relativist view of Whorf's (1956). Although there are many varieties of relativism, the core of relativism lies in the belief that conceptual systems of different language communities can be radically different. Proponents of the relativist view believe that each community draws its linguistic expressions from a set of concepts peculiar to that

¹ The universalist view of meaning described here is criticised by Sampson (1980). The universalist view represents what Sampson calls the 'limited view'. The limited view, according to Sampson (1980:2), claims that 'in principle, we can make predictions of the working of the mind from an inspection of a man's mind as it is at a given time, to know what ideas he is potentially capable of formulating in the future'.
community beyond which members of the community can never go.\(^2\)
The relativists believe that translation which crosses the boundaries of such sets is fundamentally difficult, if not impossible.

Such discussions of translation, whether advocating a relativist view, where the differences between languages are stressed, or a universalist view, where all languages are thought to have some universal features in common, assume that words have objective meanings which are independent of the language users. I refer to this view of language, which regards words and sentences as having their own meanings independent of the language user, as 'the container view'.

In this view, the success of translation will be directly proportional to the degree of overlap in meaning between the corresponding words in the TL and the SL. The container view of language is discussed in detail in Chapters 2 and 3.

The view I advocate in this thesis is one which is very different from the container view in that the credit for the success of translation is given not only to the mechanisms of the two languages, but also to the language users, and the difficulty in translation is not attributed to the different ways in which languages 'carve up' a common world, but rather to the differences in experience that people in different

\(^2\) Berlin and Kay's (1969) study of colour terms has shown that although languages may 'carve up' the colour spectrum in different ways, there is universal agreement on the best examples of the basic colour terms.
language communities undergo.

Following a cognitively oriented approach to meaning represented by e.g. Rosch 1973, Fillmore 1977, 1978, 1982, Rumelhart 1979, Lakoff 1987, and Sweetser 1990, I look at word meaning as something that is based on imagery—something that exists through human perception, and not something that has an objective existence of its own. This is not to say that each individual defines his or her own image of a word and that there is no significant overlap in the images or meanings of words shared by the speakers of the language. The role of convention in language is substantial, and the semantic structure of a language is largely based on the conventional imagery established in the language community.

By abandoning the notion of objective meaning and adopting a more image-based notion of meaning, we arrive at a notion of word meaning which lends itself more easily to vagueness of semantic categories, linguistic creativity, and also to the process of translation.

The role of convention in language is discussed in Chapter 4 under the heading 'conventional signs'. People who have a good knowledge of two language communities know (consciously or unconsciously) that the people in one language community have a tendency to refer to certain institutionalised concepts which may differ from those which speakers of the other community commonly talk about. They also know that speakers of each community have particular ways of talking about those
things which they commonly talk about. Thus even if members of two language communities talk about similar concepts, they may talk about the concepts in different ways. Following Grace (1987), I take the view here that there are no discrete units of meaning which exist objectively, ready to be encoded by language, and that it is the language users who impose their own categorisation onto what they perceive as reality. If enough people in the community adopt a certain way of categorising reality, that category will become part of their language. However, since the categories are constructed through human perception and do not exist on their own, there is no assurance that any other culture will recognise the same category. I use the term 'conventional sign' for linguistic forms encoding categories that the people in a language community have come to perceive and that have become established in the community as something that the language users commonly talk about. A conventional sign may be a single word, or it may be a phrase or a sentence. Single-word conventional signs are the items of vocabulary in a language. These words represent perceptual categories which the language users in the community have come to recognise and adopt. Such single-word conventional signs can be combined in order to express new ideas. The language user can express a new idea by selecting a number of single-word conventional signs which she thinks best characterise the new idea she wants to express. By doing so, she imposes a certain characterisation on the new concept. The choice of words in a

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3 The notion of 'conventional signs' that I discuss is an expansion of Grace's (1987) notion of 'conventional signs'.
multi-word sign is motivated by the way in which the language user characterises the concept she is referring to. When such a characterisation becomes established, we have a multi-word conventional sign.

The significance of conventional signs for translation is that since they represent different established perspectives of the members of different language communities, they may create difficulties for translation.

The conventional-sign view advocated here shares some similarities with the relativist view. Like the relativist view, it assumes that concepts and viewpoints which are encoded in one language may not be encoded in another language. Where my view differs from the relativist view is in not assuming that each language draws on a limited set of concepts or perceptions. It does not claim that the language user cannot ever perceive thoughts beyond what is characterised in her language by its conventional signs.⁴

Conventional signs are further examined in Chapter 5 in relation to Fillmore’s (1982) Frame Semantics. A specific case study of the frames associated with two Japanese verbs is discussed in the first part of this chapter. The conclusion I draw from the case study is that a view of meaning which

⁴ As mentioned earlier, there are various versions of the relativist view. The relativist view which I am contrasting my view with here would be a strong relativist view. A weaker version would not necessarily claim that members of a language community cannot perceive the concepts not encoded in their language.
does not consider our experience associated with a word fails to capture how a translator selects an adequate translation equivalent.

A second case study is presented in the same chapter as a way of leading up to the discussion of another aspect of language, namely the dynamic nature of meaning. This case study deals with how speakers of one language make sense of conventional signs from another language. The results show that upon encountering a novel characterisation of reality given by the literal translation of the SL, the hearer tries to make sense of the expression by relating it to a conventional sign in her own language which she thinks gives a similar characterisation. When no similar conventional sign can be found in her own language, the hearer will try to interpret the novel expression by relating what is characterised in the expression to her knowledge of the world.

Chapter 6 deals with how differences between languages due to differences in their conventional signs are overcome in actual translation. In my discussion of conventional signs, I try to establish what category of experience motivates a conventional sign. Explaining why certain concepts are encoded by linguistic forms in a particular language community, or determining what motivates the combination of certain words in a multi-word conventional sign is, however, different from being able to predict which concepts will be encoded by linguistic forms, or being able to predict which combination of words will become established in a given
language community. The world does not come pre-labelled and pre-categorised. It is the people who form concepts and perceive things as similar to each other. What the speaker might see a newly encountered phenomenon as similar to is not predictable, and the set of semantic properties of an existing word which the speaker may seize on to apply the word to the newly encountered phenomenon is not predictable either. A necessary condition to enable one to use an existing word to refer to a newly encountered phenomenon is for word meaning to be flexible enough so that it can be extended. This kind of semantic extension is commonplace in language, and it rarely creates difficulties in understanding. The reason for this is that just as people can be creative in ways of perceiving things, they also have the creative capacity to make sense of novel descriptions by relating them to their own experience.

The view of language advocated in this chapter is largely representative of what Reddy (1979) calls 'the toolmakers model'. In the toolmakers model, language is thought to only crudely capture the outline of human thought. In order to compensate for this, language users need to make a real effort in communication. The speaker makes assumptions about the hearer's state of mind, and the hearer must use every available resource in order to make sense of the speaker's utterance. The meaning which is understood by the hearer thus becomes a function of the outline of the speaker's thought only roughly expressed by the linguistic forms and of the hearer's contribution in making sense of the forms. I suggest that the hearer's understanding takes the form of a
mental model which is based on the frames associated with the linguistic input and on the hearer’s knowledge which best accounts for the combination of the frames.

As evidence supporting this view, I cite the experiments conducted by psychologists (cf. Bransford and Johnson 1973) on comprehension and memory which demonstrate how we constantly use our general knowledge in understanding linguistic expressions. The results of such experiments indicate that our understanding of a discourse includes more information than that given directly by the linguistic input alone. The source of this other information is our knowledge—our ability to infer certain things from given information, our ability to provide a context which would give the linguistic input some cohesion, and our knowledge of the way things are in the world we live in.

These results are particularly interesting because they provide a clue to understanding the process of translation. When a translator tries to understand an SL text, she too constructs an image, and once this image is constructed, she almost does not need the actual SL forms as long as she has access to this image. It is this image which she bases her translation on, and the translation may include information which is not directly given in the SL text. Since the translator is not moving directly from language to language, no close correspondence between the linguistic forms of the SL and the TL needs to be sought. This also explains why it is relatively easy to translate concepts related to shared
experience where the TL and the SL users can both easily visualise a similar image even when dealing with two typologically very different languages, such as Japanese and English.
2. THE CONTAINER VIEW OF LANGUAGE

2.1 Introduction

Reddy (1979), in his paper entitled 'The conduit metaphor---a case of frame conflict in our language about language', discusses a framework which underlies many English expressions about communication. In this framework---called the 'conduit framework'---language is viewed as some sort of external container wherein human thoughts and feelings can be placed. In the conduit framework, a speaker transfers her thoughts or feelings to a hearer by placing them inside language. (Reddy gives the English expressions Try to pack more thoughts into fewer words or Don't force your meanings into the wrong words as examples which reflect the process within the conduit framework.) The hearer's task is one of extracting the thoughts or feelings from the language in which they reside: Can you actually extract coherent ideas from that prose?; Let me know if you find any good ideas in the essay.

Thus, in this view, language functions like a conduit, transferring thoughts from one person to another: Try to get your thoughts across better; None of Mary's feelings came through to me with any clarity. In this framework, in order to succeed in the transfer of thoughts, the speaker must find the right container into which her thought fits. The hearer's role, upon receiving the 'package', is to extract the speaker's thought from it. If the hearer does not extract the thought correctly, it means that she is not paying attention to what's there in the words, or is reading things
The pervasiveness of the conduit metaphor in the English language is illustrated by the numerous examples Reddy includes in his paper. It is quite easy for someone to take these expressions literally and assume that language actually functions in the way described by the conduit metaphor. The absurdity of taking these English expressions literally as projecting an accurate characterisation of communication by means of language can be shown simply by considering that if all words were empty before speakers 'insert' meanings in them, there would be no reason why a speaker should choose to insert the meaning of 'table' into the container table, rather than a into container like hamburger.

A weaker interpretation of the conduit metaphor would be one where words or sentences are not considered to be 'empty' but nevertheless 'containing' meanings. In this weaker interpretation, the process of communication would be one of the speaker selecting the words or sentences which contain the thoughts she wants to express, passing it to the hearer, and the hearer extracting the speaker's thoughts by simply looking at what is contained in the words the speaker has selected.

It is this assumption that words and sentences 'contain' meanings and that meaning can be studied independently of language users which I will be arguing against in this thesis. The 'container view' of language has been prevalent throughout the history of linguistics, particularly in various theories
Taking this assumption unquestioningly, many linguists and philosophers of language set about in their search for meaning by examining what it is that is contained in words or sentences. Meaning, they assume, is to be found within linguistic forms. What linguists and philosophers have claimed to be the 'meaning' has varied from school to school, but their efforts have concentrated on formulating and defining what they decided the 'meaning' to be. In doing so, they have made a further assumption, namely, that the meanings contained in words or sentences can be specified exhaustively and objectively.2

The container view of language has had a profound effect on semantic theories. The semantic theories based on it have in turn affected theories of translation. In this chapter, I first examine the semantic theories and the theories of translation deeply entrenched in the container view. I will argue later that none of the assumptions made in the conduit framework are tenable and that therefore they cannot be used as grounds for claims about the nature of language.

1 Moore and Carling (1982) and Grace (1987) also critically discuss the view of language in which words and sentences are assumed to 'contain' meanings.

2 What I mean here by specifying meaning exhaustively and objectively is that in this framework, it is assumed that meaning can be studied independently of the language user and can be defined clearly. Within such a framework, characteristics of language such as vagueness of extension (cf. Labov 1973) or family resemblances (Wittgenstein 1953), semantic shifts, semantic extensions, and subjective categorisation will be difficult to explain.
2.2 The assumptions of the container view and semantic theories based on this view

When one is studying the history or the development of certain theories, one is often inclined to think that ideas progress in discrete stages, and that the latter stage is fundamentally different from and an improvement on the previous stage. However, in actual fact, the latter stages often contain relics from the previous stages which have just been passed on without ever having been critically examined. Superficially, the two stages may look quite different from each other, and it may look as if the shortcomings of the earlier stage have been noted and corrected in the later stage, but at a deeper level the two stages may in fact be quite similar. In the light of the above mentioned basic assumptions made about language, the various schools of thought on meaning begin to look quite similar. Linguists and philosophers have rarely looked beyond language itself in their search for meaning. It was always words and sentences which meant something, and the language users played no significant role in imparting meaning.

The assumption that linguistic forms contain meanings which can be specified objectively surfaced perhaps most prominently in the school of logical semantics. The logical semanticists, such as Frege, Russell, Carnap, and the early Wittgenstein, were interested only in the logical aspect of natural language, and their goal was to construct an ideal or artificial language which would be logical, unambiguous. In doing so, they borrowed concepts from mathematical logic, such as set theory and propositional calculus.
According to the logical semanticists, each word ideally stands for a concept or a set of concepts in the real world, and a sentence stands for a state of affairs (i.e. events or situations). In order to keep the language unambiguous, it was imperative to the logical semanticists that the concept or the state of affairs that the word or sentence stood for be defined clearly and objectively. In addition, it was important to assume that the object or set of objects in the real world which the word picked out could be established uniquely in order for the truth value of a proposition to be determinable.³

The logical semanticists' objective was to isolate those sentences with meaning (those whose truth values could be determined) as part of natural language and to exclude sentences without meaning. Formal logic was used as an apparatus to construct criteria for verifying such meaningfulness. The following quote from Carnap (1959) shows that the reason why the logical semanticists saw a need to construct an ideal language was because natural language was far from ideal in a logical sense:

The fact that natural languages allow the formation of meaningless sequences of words without violating the rules of grammar, indicates that grammatical syntax is, from the logical point of view, inadequate. (Carnap 1959:68)

Yet the assumptions that the logical semanticists made about

³ Moore & Carling (1982) discuss words whose referents are difficult to specify uniquely and whose meanings cannot be characterised independently of their occurrence in combination with other words. An example they give is put on. Put on takes on its meaning in relation to the other words it occurs in combination with: put on the television/your socks/a big smile/the tablecloth/ the milk/the brake/the dinner.
an ideal language came to be adopted by many linguists and philosophers even though the latter were no longer dealing with an ideal language and were claiming to be dealing with natural language.

In the early 20th century, Saussure (1959 [1915]) developed a structuralist approach to language. For Saussure, language was a structure or system the units of which were to be defined in their relationship to other units within the system. From what is seemingly a continuum of nondiscrete sounds, Saussure says, we are able to identify allophones of the same phoneme, or contrast different phonemes by imposing a structure onto the sounds. The same notion is applied to thoughts. Word meaning is said to be derived from the imposition of structure on the otherwise vague continuum of thought. The structure which is imposed on the sound and the thought is called the 'form' in Saussurean structuralism, and the sound and the thought are the 'substance of the form'. The Saussurean dichotomy of form and substance can be equated with the container-and-content dichotomy of the conduit metaphor. The structuralists’ view of language presupposed that the meaning of a word could be defined clearly in terms of its relation with other words and their meanings in the system.

Bloomfield (1933), influenced by Weiss's behaviourism, adopted an anti-mentalist approach and emphasised a need to break away from the abstract mathematical concepts of the logical semanticists. Bloomfield concentrated very much on
the relationship between language, or what he called 'verbal behaviour', and the conditions in the external world which evoke a given verbal response. He called the observable circumstances the 'stimulus meaning' and claimed it to be the only legitimate kind of meaning as it is the only kind of meaning that can be described in terms of directly observable conditions. His assumption was that there was a direct correspondence between verbal behaviour and the conditions which evoked it. Bloomfield also assumed that the features of the stimulus evoking the verbal response could be clearly and objectively defined. As he wrote:

[I]t is clear that we must discriminate between non-distinctive features of the situation, such as the size, shape, colour, and so on of any particular apple, and the distinctive, or linguistic meaning (the semantic features) which are common to all the situations that call forth the utterance of the linguistic form, such as the features which are common to all the objects of which English-speaking people use the word apple.

(Bloomfield 1933:141)

That is, Bloomfield assumed that what was relevant to the linguistic meaning could be clearly picked out from the situation, and that those features were common to all occurrences of a given word, such as apple.

The rationalists' approach to language led by Chomsky (1959) and their approach to meaning led by Katz and Fodor (1963) came about as a reaction to the purely empirical approach of Bloomfield's. The rationalists noted that the actually occurring sentences which Bloomfield was basing his description on are only a small fraction of the infinite number of sentences the rules of the language can generate. The goal of the rationalists, then, was to discover the native
speaker's linguistic capacities, which are manifested in the production of sentences. In order to explain the infinite nature of language, the rationalists constructed hypotheses about the linguistic rules internalised by native speakers. These hypotheses were based on the judgements by native speakers concerning a finite set of data. These rules are claimed to be what the speaker uses in producing syntactically well-formed strings of words. The linguistic rationalists assume that the externalisation ('performance') of the internalised linguistic rules suffers from extraneous factors, such as mood changes, beliefs, memories, etc., and they have postulated

'an ideal speaker-listener, in a completely homogeneous speech-community, who knows its language perfectly and is unaffected by such grammatically irrelevant conditions as memory limitations, distraction, shift of attention and interest, and errors in applying his knowledge of the language ('competence') in actual performance.'

(Chomsky 1965:3-4)

Thus, in a manner similar to the way in which the logical semanticists set up an ideal language, the rationalists are dealing not with something that can be equated with its exemplifications, but with an idealisation, and the theory of language that they have constructed deals not with actual occurrences which suffer from extralinguistic factors, but with the grammatical structure which underlies the actual sentences.

The function of the semantic component of the internalised grammar postulated by the rationalists is to interpret the well-formed sentences in terms of an allegedly universal inventory of semantic features obtained by decomposing word
meaning into primitives (cf. Katz and Fodor 1963).

The assumption that one need only look at words and sentences in contrast to other words and sentences to find their meaning is fundamental to the rationalists. It is also fundamental to their approach to meaning that word meaning can be clearly defined objectively.

Whereas Bloomfield assumed a direct link between verbal behaviour and the stimulus which evokes it, the rationalists assume a direct link between the word and the concept it represents without any role for the language user. The roles of the speaker and the hearer have gradually diminished in various theories of meaning, and words and expressions whose meanings cannot be explained without reference to the speaker or the hearer or the actual situation (such as deictics) have come to have little significance in semantic theory.

2.3 Semantic theories and translation

The brief and general review of several different schools of meaning presented above in their relation to the characterisation of language projected by the container view of language allows us to formulate the following assumptions about meaning which underlie all the theories just described:

a) meaning is contained in linguistic forms, such as words and sentences;

b) word or sentence meaning can be specified objectively and exhaustively independently of the language user.

This general view of meaning has had a significant effect on
theories of translation. The container view gives the distinct impression that the process of translation consists in taking the meaning out of the source-language container and simply placing it in the target-language container. The picture of translation presented by Katz in his 1978 paper entitled 'Effability and Translation' is of exactly this kind.

Katz assumes that the meanings of linguistic expressions can be separated from their forms and claims that there is a finite set of meanings that can be rendered in any language. His discussion of translation starts off with a criticism of Quine's (1960) Indeterminacy Thesis. Quine's view represents the anti-universalism of the behaviourists/empiricists of the time. Although the behaviourists/empiricists firmly believed in defining language objectively and in making generalisations within a single language, they were sceptical or at least extremely cautious about making any universal generalisations.

In the following section, I will give an overview of Quine's Indeterminacy Thesis and then follow it with a rather lengthy exposition of Katz's Determinacy Thesis. The reason for the lengthy discussion is that Katz's view clearly manifests the effect of the container view of language on theories of translation. Following this, I will discuss the view of language advocated in this thesis in relation to Quine's and Katz's views.
2.3.1 A behaviourist’s view of translation

Quine expresses his scepticism about an abstract notion of meaning in *Word and Object*:

...containment in a continuum of cultural evolution facilitated translation of Hungarian into English. In facilitating translation these continuities encourage an illusion of subject matter: an illusion that our so readily intertranslatable sentences are diverse verbal embodiments of some intercultural proposition or meaning, when they are better seen as the merest variants of one and the same intracultural verbalism. (Quine 1960:76)

Typical of the behaviourists/empiricists of his time, Quine accepts stimulus-meaning as the only legitimate kind of meaning, as it is the only kind of meaning that can be described and validated in terms of directly observable conditions. Quine holds that we learn language by observing other people’s verbal behaviour and by having our verbal behaviour observed and reinforced—positively or negatively—by others. He concludes that if this is the way we learn the meanings of words and sentences, then ‘there is nothing in linguistic meaning...beyond what is to be gleaned from overt behavior in observable circumstances’ (Quine 1987:5). Discovering meaning in this way, however, has its limits. In order to exhibit these limitations, Quine presents a thought experiment of ‘radical translation’. Radical translation is a translation of an SL inaccessible through any other language, so that the data the field linguist can base his translations on are only the SL speaker’s utterances and their concurrent observable circumstances; that is, the observer does not know the SL. Although in most cases the concurrent observable situation does not enable the linguist to predict what the native
speaker's utterance conveys, Quine notes that there are sentences which hinge on concurrent publicly observable situations, such as It's raining or That's a rabbit. Quine refers to such sentences as 'observation sentences'. In the case of observation sentences, the translator can tentatively associate the SL utterances with the observed concurrent situations and later verify the link by volunteering such sentences himself when the corresponding situations recur and by checking for the SL speaker's assent or dissent.

The meanings of observation sentences can therefore be determined by means of their concurrent observational situations, and so the meanings of such sentences are open to empirical investigation. However, most sentences are not observation sentences; they may bear little relevance to the circumstances observable at the time. In trying to figure out the meanings of such sentences, the linguist will make use of what he has discovered from the observation sentences, but the problem remains how to decompose the observation sentences into semantically significant parts and link them to other sentences. The number of possible conjectures the translator may make regarding the SL speaker's utterance is enormous. Such guesswork means that two translators working independently with the same SL may come up with two different translations of an utterance. In so far as both translations match the SL speaker's verbal behaviour and the observable circumstances, Quine claims that one cannot say that one translation is 'really right' and the other wrong. This is the basis of Quine's Indeterminacy Thesis.
Quine also discusses the indeterminacy of word meanings in his example of the word gavagai. He writes that if a speaker of an undescribed language says gavagai each time he sees a rabbit, the field linguist may conclude that gavagai has the same stimulus-meaning as the English word rabbit and is thus its translation equivalent. However, the native speaker may each time be referring to an undetached rabbit part rather than to the whole rabbit. This means that the linguist has mistakenly equated a word for a rabbit part with the English word which generally refers to the whole rabbit. However, this mistake will not be easily detected because in the ability to utter the word gavagai each time he sees a rabbit, the linguist will be no different from the native. In other words, the semantic correlation the linguist has made would not be observable in the linguist’s behaviour.  

This unobservable discrepancy between the linguist’s semantic correlation of gavagai with ‘rabbit’ and the native speaker’s semantic correlation of gavagai with ‘an undetached rabbit part’ leads Quine to conclude that the reference of gavagai is inscrutable. Because the link between the stimulus and the speech signal is inscrutable, the matching of translation equivalents in two languages is considered by Quine to be indeterminate.

4 In a real field situation, the field linguist may have the opportunity to encounter the word gavagai in a situation where he would be able to determine whether the word referred to the whole rabbit or to an undetached rabbit part; for example, if the native speaker held the rabbit’s foot and pointed at it and said gavagai and called another part of the rabbit something else. However, the linguist may then wonder if gavagai only refers to a rabbit’s foot or whether it refers to the paws of any animal.
2.3.2 A rationalist’s view of translation

Katz (1978) argues that Quine’s view rests entirely on an empiricist theory of language which allows only observable speech behaviour to enter into the description of language and which sees language as nothing more than a reflection of our experience. As an alternative to this empiricist view, Katz introduces the rationalist view advocated by Chomsky. Chomsky’s revolution consisted—among other things—in changing the description of language from one based on the categorisation of observational data to one which is a model of the mental principles that constitute the native speaker’s linguistic competence. Chomsky has argued that in order to explain syntactic relations within sentences, ambiguity, and a range of other linguistic phenomena, one has to go beyond what is observable and introduce unobservable postulates. Such hypotheses are then tested by their capacity to generate linguistic structures acceptable to the native speakers of the language. The rationalist view postulates meanings and semantic rules as part of the hypothesis about the structure of language. These hypotheses about meaning are to be tested by their capacity to account for semantic properties and relations such as meaningfulness, ambiguity, synonymy, analyticity, etc.

Katz (1972:3) states that the reason why semantics had been considered ‘an irretrievably dreary discipline’ lies in the supposition held by many linguists and philosophers that the question ‘what is meaning?’ can be answered in a direct and straightforward way. Katz takes the question ‘what is
meaning?' to be unlike questions such as 'what is the capital of France?' or 'where is Tasmania?' to which direct and simple answers can be given. Rather, he takes the question to be a theoretical one, comparable to questions such as 'what is matter?' or 'what is electricity?', which can only be answered by a theory rather than by an isolated statement of fact. Thus, Katz goes about finding the answer to the question 'what is meaning?' by constructing a theory. The goal of the theory is to find the underlying principles that interrelate and thus organise empirical facts about meaning, just as syntactic rules explicate the relationship between, say, an active sentence and its passive counterpart.

The kinds of phenomena a semantic theory has to explain include the following: synonymy, ambiguity, redundancy, contradiction, entailment, and presupposition. After constructing a theory which he claims to successfully deal with such properties and relations, Katz looks at what the theory needed to assume meaning to be in order to provide general principles that underlie such semantic phenomena. The answer, according to Katz, is to identify sentence meaning (or in his terms, 'sense' or 'thought') with propositions (or what he sometimes calls 'logical form'). The justification for this construal is that by identifying meaning with propositions, we simplify the correlation between the behaviour of propositions in logic and the behaviour of sentence meanings in language. Katz (1978:202) gives the following examples of distinctions that logicians make between sentences that express propositions and sentences that do not.
(1) is an example of the former, and (2) is an example of the latter:

(1) Charles drinks prune juice.

(2) Charity drinks procrastination.

Also, logicians distinguish between sentences that express single propositions such as (1), and sentences such as (3) that express more than one proposition and so are ambiguous:

(3) He insulted an old man and woman.\(^5\)

Furthermore, logicians take some sentences to express the same proposition. Thus (4) is said to express the same proposition as (1):

(4) Prune juice is drunk by Charles.

Katz says that there are linguistic facts which correspond to the kinds of propositions mentioned above. Most linguists would characterise a sentence like (2) as meaningless, that is as having no sense in contrast with (1), which is meaningful. A sentence like (3) is ambiguous; that is, it has more than one meaning. And, according to Katz, sentences (1) and (4) are synonymous.\(^6\) According to Katz, the best way to explain the correspondences between the meanings of sentences and the propositions which those sentences express

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\(^5\) This example is taken from Katz (1978:202). Presumably, Katz assumes that the sentence can be taken to mean 'He insulted an old man and an old woman', or 'He insulted an old man and a woman (not necessarily old)'. Several native speakers of English have pointed out to me that the ambiguity is stronger if the nouns man and woman are in their plural forms: He insulted old men and women. To them, Katz's sentence is not ambiguous: the scope of 'old' does not include 'woman'.

\(^6\) Many linguists would not agree with Katz's saying that these two sentences are synonymous; instead they would regard them as only partially synonymous.
is to identify sentence meanings with propositions. Katz defines the proposition or the meaning of a sentence to be its semantic properties and relations. The semantic properties and relations of a sentence include its synonymy relations, semantic anomaly, redundancy, analyticity, and entailment. These properties and relations are assumed by Katz to be universal. Katz contends that although specific synonyms vary from language to language, the notion of synonymy is always the same. He not only maintains that the semantic properties and relations are universal; he is convinced that the structures of language which exhibit such properties and relations also are universal. Katz formulates a Determinacy Thesis (so termed to contrast with Quine’s Indeterminacy Thesis):

**Determinacy Thesis (DT)**

For any pair of natural languages Li and Lj, and for any sentence S in Li, and for any sense θ of S, there is at least one sentence S' in Lj such that θ is a sense of S'.

(Katz 1978:206)

The DT concerns partial synonymy of sentences S and S' in two languages (Li and Lj) rather than full synonymy. This is to say that S and S' in languages Li and Lj are not synonymous in every sense they may have, but one of the senses of S is equivalent to one of the senses of S'. Translation is

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7 Quine agrees that one matches SL to TL in a way which preserves, particularly, entailments. But Quine maintains that, in the end, beliefs about logic are themselves beliefs which the speaker and the translator may differ on. That is, we have to assume a shared logic (and a shared perception of the world) to make translation possible. This assumption may be as wrong as the assumptions we make in deciding what gavagai refers to. (I am indebted to J. Crosthwaite for pointing this out to me.)
defined by Katz as a special case of partial synonymy that holds between sentences of two languages. Since the DT is concerned with partial synonymy, it allows (5) and the Spanish sentence (6) to be translations of each other, whereas a DT based on full synonymy would not:

(5) I need someone who has earned the degree of doctor of medicine or the equivalent.

(6) Necesito un doctor.

Katz, however, does not disregard the surface syntactic structure altogether. He postulates several levels of translation equivalence, each of which can be obtained from the preceding level by the addition of non-semantic properties and relations. The levels indicate a hierarchy of translation relations starting from the 'base line' which merely achieves the identity of propositional content:

K = the semantic properties and relations of senses  
K1 = K + the deep syntactic properties and relations  
K2 = K1 + the surface syntactic properties and relations  
K3 = K2 + the phonological properties and relations

Hence, although (5) and (6) are K translations of each other, they are not K1 translations of each other. On the other hand, (7) and the French sentence (8) are K1 translations of each other but not K2 translations because (7) has undergone Gapping while (8) has not:

(7) The boy drinks whisky and the girl wine.

(8) Le garçon boit le whisky et la jeune fille boit le vin.

By identity of phonological properties across languages achieved in K3, Katz means phonological properties and relations such as rhyme, alliteration and metre. Sentences
(9) and (10) are K2 translations, but fail to be K3 translations because the rhyme in the English is not rendered in the Polish sentence:

(9) The rain in Spain falls mainly in the plain.
(10) Deszcz w Hispabii pada przewaznie na dolini. 

Katz also suggests that there could be further levels beyond K3 which might include connotation of words. The example he gives is not a cross-linguistic one, but one from English. He says that neutral words like black and Jew may not be adequate renderings of terms like nigger and kike if the text depends on the offensiveness of these terms. Whereas propositions set the base line at (partial) synonymy and figure in every translation, such stereotypical concepts as the derogatory connotation of kike are said to determine the tightest translation relation in the hierarchy in terms of translation equivalence.

The DT is based on two important assumptions. One is that all members of the human species share the same possible propositions, and the other is that the human species is equipped with a language mechanism which has the capacity to express such possible propositions. The first assumption is expressed in Katz's claim that propositions are universal. Katz takes thoughts to be specific tokens of the abstract propositions; that is, although we may think in different languages, the content of those thoughts can be represented by the abstract concept of propositions, which are universal.

The second assumption follows from what Katz calls the
'Effability Principle':

Each proposition can be expressed by some sentence in any natural language. (Katz 1978:209)

The Effability Principle expresses the capacity of the syntactic and phonological levels of language to encode semantic concepts. This suggests that the sentences of a language and the set of possible propositions which represent human thought and which are considered to be universal by Katz are, in principle, in a one-to-one correspondence.  

2.4 An alternative to the behaviourist and the rationalist approaches to meaning and translation

Katz (1978) and Quine (1960) represent two extreme positions with regard to the determinacy of meaning and translation equivalents. In this thesis, some sort of middle ground will be sought. Katz’s Determinacy Thesis is a clear manifestation of the container view of language. It is based on the assumption that a sentence in any language represents a proposition which derives from a set of possible universal propositions. On the other hand, Quine does not believe in the abstract concept of universal propositions; consequently, the meanings of sentences in one language must be determinable without any guide from the meanings of another language. The middle ground sought in this thesis is as follows.

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8 Note that although the DT is a corollary of the Effability Principle, the Effability Principle is a stronger claim than the DT, and that the DT could be accepted without accepting the Effability Principle. The DT makes a claim about meanings which are encoded in a natural language, whereas the Effability Principle makes a claim about all meanings whether they are encoded in a natural language or not. (I am indebted to J. Crosthwaite for pointing this out to me.)
I agree with Quine in that the intertranslatability between Hungarian and English is not the result of encoding a set of language-independent meanings in the two languages. At the same time, however, I believe that what Katz states in his Effability Principle---that each meaning (which, for Katz, corresponds to a proposition) can be expressed (and understood) in any language---is to a certain degree true. However, my reason for this belief differs from Katz's.

Katz believes that any proposition can be expressed in any language because each language draws on the same set of universal propositions and because the syntactic and phonological levels of the language serve to express such propositions.

In contrast, I believe that although unshared experiences may give rise to different meanings represented in different languages, people everywhere have the same cognitive capacity to understand---to a significant degree---other people’s experiences, and that the language can keep up with people’s need to express new ideas because existing meanings can be extended.9

Of course, those defending Katz’s view could argue that what I describe as a new meaning expressed by semantic extension is nothing but an extant semantic gap being filled by a pre-existing concept drawn from the set of universal meanings.

9 One could say that the possible encoding of thought into language is only limited by human cognitive capacity.
Neither my claim nor Katz's claim are empirically verifiable. It is hoped, however, that the discussions in the subsequent chapters will give support to my view of language.
3. ARGUMENTS AGAINST THE DETERMINACY THESIS

3.1 Introduction

In Chapter 2, I stated that certain assumptions made in one theory can often go undetected for generations although other assumptions made in the same theory are constantly debated. When an alternative to an existing theory is proposed, it may give the impression that the new theory replaces the existing theory wholesale, whereas in fact it does not usually replace all the assumptions of the existing theory but only certain portions of it. Typically, parts of the earlier theory are retained in its successor, often without critical debate. It is possible to propose different alternatives to replace different parts of an existing theory. What is important to note is which parts of the existing theory have been altered and which have been retained. We can then inquire whether the parts that have been retained need to be debated.

In the following sections, Katz's DT will be critically examined, and three arguments against it will be presented. The first counterargument comes from Keenan (1978), who accepts Katz's claim that all humans share the same set of thoughts but rejects the claim that all these thoughts can be equally rendered in any language. The second counterargument is Grace's. Grace (1986) distinguishes between two interpretations of the DT—a locutionary interpretation and a perlocutionary interpretation. He proceeds to reject both of them: the locutionary interpretation on the grounds that it is based on unreasonable assumptions, and the perlocutionary
interpretation on the grounds that it is not empirically testable. Finally, Givón (1989) adopts Grace’s locutionary-perlocutionary distinction and also rejects both interpretations, but on grounds that are different from Grace’s. Givón claims that word meaning needs to be defined relationally to other word meanings in the language and that the networks of word meanings differ significantly from language to language.

The discussion of the three arguments against the DT will be followed by an examination of the aspects of the DT which are rejected or retained in the alternative views. This will lead to a re-examination of Saussure’s (1959 [1915]) notion of the arbitrary nature of the linguistic sign.

3.2 Arguments against the DT

3.2.1 Keenan’s argument

Keenan (1978), in his paper entitled ‘Some Logical Problems in Translation’, writes that although Katz may be right in assuming that all human beings share the same thoughts, the expressibility of thoughts differs from language to language due to lexical gaps or to structure-destroying operations. To illustrate this point, Keenan first gives sentences (1a) and (1b):

(1) a. John saw a bear.
    b. It was a bear that John saw.

In (1b), the NP a bear has been clefted and the sentence is grammatical. However, (2b), which is formed by clefting from (2a), is ungrammatical:
(2) a. John's dancing with a bear surprised me.

b.*It was a bear that John's dancing with surprised me.

The point that Keenan makes here is that although the complex cleft (2b) is ungrammatical, the thought expressed in the sentence is easily understood by analogy with the simple cleft of (1b). 'Thus,' he writes, 'we can entertain thoughts for which we have, at hand, no grammatical expression' (Keenan 1978:167). He argues that without the same grammatical means to express thoughts, the meaning of a single sentence from a certain language cannot always be exactly expressed by a single sentence in another language. However, Keenan is sympathetic to the view that the basic nature of language is to enable people to say whatever they think. He thus offers a modified version of Katz's DT:

Anything that can be thought can be expressed with enough precision for efficient communication. (Keenan 1978:162)

This version of the DT does not make reference to any specific structural units, such as sentences, but seems to refer to an utterance or text as a whole.

Katz's (1978) reaction to Keenan's objection is as follows: As for the differences in morphological and syntactic structures of different languages, Katz writes that comparing the expressive powers of two languages in terms of differences in their morphological or syntactic structures rather than in their semantic contents is as absurd as saying that one language has less expressive power than another due to a lack of some phonological feature. According to Katz, translation has to do exclusively with the propositional content of a
sentence, not with its morphological or syntactic structure.

Clearly what Keenan requires in translation is different from what Katz requires, and the reason for this difference lies in where they assume the translation equivalence to be. Katz believes that translation equivalence is strictly determined by the equivalence of the propositional contents of sentences in two languages, whereas Keenan believes that the morphological and syntactic forms affect translation equivalence.

3.2.2 Grace's argument

Grace (1986a) seeks to identify and define the degrees to which linguists believe in what he calls the 'intertranslatability postulate'. The intertranslatability postulate, which the DT is an example of, states that anything which can be said in one language can be said in any other. Grace distinguishes two groups of linguists: those who give the postulate a locutionary interpretation and those who give it a perlocutionary interpretation. The locutionary interpretation takes the postulate to be a claim 'that for any linguistic expression in any language, it is possible to find in any other language a linguistic expression which means the same thing' (Grace 1986a:2). Katz's DT is considered by Grace to be a particularly strong version of such an

\[1\] The terms 'locutionary' and 'perlocutionary' are from Austin (1962). A locution, according to Austin, is the act of saying something. A perlocution is 'to produce certain consequential effects upon the feelings, thoughts, or actions of an audience, or of the speaker, or of other persons' (Austin 1962:101) by performing a locutionary act.
interpretation in that Katz believes that intertranslatability holds between the propositional contents of sentences. I presume that Keenan’s weaker version of the DT would also belong to the locutionary interpretation of the intertranslatability postulate. Grace (1986b:1) writes that the locutionary interpretation is about the expressibility of the same meanings across languages and makes no claim about the understandability of the translation. That is, the locutionary interpretation of the intertranslatability postulate makes no claim with regard to whether it requires a TL speaker of a certain ability to understand the translation, or whether any TL speaker might be expected to understand the translation.

As far as Grace’s explanation of the perlocutionary interpretation of the intertranslatability postulate is concerned, I find it difficult to follow, but he contrasts the perlocutionary interpretation with the locutionary interpretation by stressing that the perlocutionary interpretation concerns the possibility of being able to make the TL audience understand whatever is said in the SL. The method in which this is done is through explaining, and there is no restriction on the linguistic form in which the meaning is expressed (cf. Grace 1986b:1). The perlocutionary interpretation of the postulate claims that ‘for anything that one needs to communicate in any language, it is possible to find a way to get it across’ (Grace 1986a:3).

Grace’s use of the term ‘translation’ here is unusual because normally one would not call something a translation if one did not think that the TL audience would understand it.
Recall that the locutionary interpretation of the intertranslatability postulate claims that for any linguistic expression in any language it is possible to find in any other language a linguistic expression which means the same thing. Grace (1987) rejects this claim by explicating the assumptions made by the locutionary interpretation of the postulate, and by pointing out that none of the assumptions are reasonable and therefore cannot be used as grounds to claim equivalence between two different linguistic expressions. The assumptions made in this claim, according to Grace, are:

- There is a common world out there and our languages are analogous to maps of this world;

- Thus, this common world can be represented or 'mapped' by all languages.

The way in which I believe the above assumptions are reflected in Katz’s DT is that Katz assumes the existence of a universal set of propositions which corresponds to what Grace calls the 'common world'. The common world is what acts as the common measure of translation equivalence. Katz also assumes that all languages are mappings, or encoders of such a universal set of propositions. Since all languages are encoders of the same set of propositions, it follows that any proposition encoded in one language can be encoded in another language.

Grace (1987) argues that the only way in which a pair of sentences can be said to be translation equivalents because they 'map' the same world (which can be objects, acts, states, etc.) is if the verbs, the arguments of the verbs, and the case relations in the two sentences are in a one-to-one correspondence. Grace (1987:57) gives the following examples
taken from Vinay and Darbelnet (1958) as translations of this kind:

(3) English: The ink is on the table.
   French: L’encre est sur la table.
   (Literally: the-ink-is-on-the-table)

(4) English: I left my spectacles on the table downstairs.
   French: J’ai laissé mes lunettes sur la table en bas.
   (Literally: I-(have)left-my-spectacles-on-the-table-(in-bottom(downstairs))

(5) English: Where are you?
   French: Où êtes vous?
   (Literally: where-are-you?)

Grace (1983:3) writes that apart from the cases of sheer chance, the possibility of a translation of the above kind is attributable to the following possible causes:

a) the SL and the TL are very closely related;

b) the SL and the TL have been subject to extensive contact and cultural sharing; or

c) the sentences being translated are simple sentences dealing with concepts which are common to the experience of humankind, or contain vocabulary pertaining to environmental features, artifacts and activities common to the two language-cultures.

Grace claims that such cases of translations account for only a small portion of translation and that it is unrealistic to think of translation as being typically of this kind.

Grace proceeds in his argument to reject also the perlocutionary interpretation of the intertranslatability postulate, according to which for anything one needs to communicate it is possible to find a way to make it understood in another language. His main concern is finding some sort
of criteria by means of which one may determine that the TL audience has indeed understood the same thing that the speaker/writer of the SL intended her SL audience to understand. Grace concludes that there is no way in which this can be determined and that therefore the perlocutionary interpretation of the intertranslatability postulate does not constitute an empirical claim.

3.2.3 Givón’s argument

As part of his explication of context, Givón (1989) discusses culture as a context constituted by the shared knowledge of the members of the same speech community. Translation comes into consideration because, according to Givón, translation is 'the transfer of knowledge across major linguistic-cultural boundaries' (Givón 1989:324).

In his inquiry into the possibility of translation, Givón discusses the following 'translation and universality hypothesis':

'If understanding a language requires understanding the cultural world-view, then cross-linguistic translation is only possible if cross-cultural differences are relatively shallow; that is, if the world-view held by different human cultures is largely universal.' (Givón 1989:324, original emphasis)

Recall that Katz not only considers cross-cultural differences to be shallow, but also largely disregards or trivialises cross-linguistic diversity in lexical and grammatical structure. This is exemplified not only in Katz’s (1978) argument against Keenan (see Section 3.2.1), but also in his argument against Quine. Quine (1960:76), in arguing against the notion of a language-independent proposition, writes that
a sentence such as *neutrinos lack mass* cannot be translated into a 'jungle language' without in effect teaching the 'jungle people' physics and thereby altering their world view considerably. Katz's response is as follows:

failure to translate theoretical sentences represents only a temporary inability of the speakers, based on their lack of knowledge of the relevant sciences, to make the proper combination of primitive semantic concepts to form the appropriate proposition. (Katz 1978:220)

For Katz, the lack of vocabulary represents only a temporary gap in the lexical structure, not a deficiency of the language. In practice, he claims, one can always resort to creating new vocabulary items, paraphrase, or metaphorical extension to get the content across.3

Givón, on the other hand, regards the structural or formal differences between languages as non-trivial. He rejects the strong locutionary interpretation of the intertranslatability postulate which Katz advocates by using the same argument as Keenan does, and he provides additional examples where the grammatical requirement of a language prevents one from encoding events or states in the same way one might encode them in another language. One of the numerous examples Givón (1989:331) gives is the case of serial verb constructions in the following African languages:

(6) Yatye: *iywi awa_utsi iku*
boy took door shut
'The boy shut the door'

3 For Katz, introducing new vocabulary in a language does not produce changes in the world views of the language users.
(7) Yoruba: *mo fi ade ge ṉakā*
   I took machete cut wood
   'I cut (the) wood with the machete'

(8) Efik: *nam utom eemi ni mi*
   do work this give me
   'Do this work for me'

(9) Igbo: *o gbara gaa ahya*
   he ran go market
   'He went to the market'

Givón writes that if the above serial verb constructions are viewed as sentences encoding single propositions, and if their divergence from their English counterparts is viewed as a relatively superficial fact of grammar, then Katz's DT would be unproblematic. However, Givón sees verb serialisation as a 'profound cognitive difference in event perception ... whereby cultures that practice this type of event coding indeed perceive our unitary event as a chain of multiple events' (Givón 1989:332, original emphasis). If Givón is right, Katz's DT as well as Keenan's weaker version of the DT become untenable.

Givón (1989) adopts Grace's (1987) distinction between the locutionary and the perlocutionary interpretations of the intertranslatability postulate, but his understanding of what Grace means by the perlocutionary interpretation is different from mine. I mentioned earlier that the perlocutionary intertranslatability claim is not about linguistic form, but about the understandability of translation. Its claim is that for anything that one needs to communicate in any language it is possible to find a way to get the meaning across into any other language (cf. Grace 1986b:1; 1987:63).
Compare this to Givón's characterisation of Grace's notion of perlocutionary translation:

This approach concedes the existence of non-trivial structural differences between languages. It then allows for a sentence of one language to be translated into any 'expression' of another language, be that expression a single sentence of the same structure, a single sentence of a different structure, or a number of sentences assembled together in whatever configuration. (Givón 1989:329)

This interpretation of perlocutionary translation is no different from Keenan's weaker version of Katz's DT. Thus, Givón's arguments against the perlocutionary intertranslatability claim are really aimed at Keenan's weaker version of Katz's DT.

Givón rejects Keenan's weaker version of Katz's DT by claiming that

the major impediment to cross-language---thus cross-culture---translation is meaning, as coded primarily in the lexicon. This is so because 'missing vocabulary' does not entail trivial, accidental gaps in a lexicon.... Rather, the vocabulary of a language---that massive repository of the cultural world view of a speech community---is a highly structured network. (Givón 1989:340)

Givón writes that when a translator tries to provide a paraphrase of the SL vocabulary which the TL lacks, the process will yield the following possible results:

a) failure of cross-cultural translation;

b) profound readjustment in the target populations' cultural world-view; or

c) the maintenance, in the mind of the target population, of two---well segregated but conflicting---cultural world views. (Givón 1989:339)

The reason for this, Givón argues, is that vocabulary is deeply entrenched in its context and there is no 'universal core' which is encoded in every language. One of the
examples he uses to illustrate this point is the way in which spatial orientation is expressed in Guugu Yimidhirr, an Australian Aboriginal language. Givón points out that although Miller and Johnson-Laird (1976) have claimed that features of space perception, such as the front-back and the left-right distinctions, are cognitive human universals, Haviland (1986) observes that in Guugu Yimidhirr right-left or front-back designations are not used to indicate the position of objects in geographical space relative to the speaker, hearer, or any other reference point. Rather, the cardinal compass points are invariably used. Givón (1989:346) gives the following example from Haviland 1986:

(10) ...ngayu qurray nyundu yarrba ganbarra
      I say/PAST you this/way jump/IMPER

ngaal-nguurr...
east -FOC

'...I said: "You jump in there on the East side..."'

According to Givón, replacing the compass points with the English left-right and front-back distinctions is not a trivial matter. He writes that those who have studied Aboriginal cultures agree that the ever-present coding of physical space in terms of the compass points has profound ramifications in those cultures and considerable bearing upon the people’s emotional and spiritual life. To replace the compass points distinction with the right-left and the front-back distinctions of English would accomplish, according to Givón (1989:347), nothing in conveying these ‘multiple network connections’.

\textsuperscript{4} In English, compass points are not used for relatively restricted spaces.
Importantly, Givón does not resort to extreme relativism. Although he does not explicitly state the reasons, I see them to be twofold. First, he does not assume that an adequate translation requires a perfect match of the items in the two languages. He believes that there is never complete understanding in any type of communication, and he expects no more from translation than mere approximation. He therefore concludes that with an approximate match, translation can be considered successful.

The second reason, which is related to the first, is that although Givón does not expect the entire system of one language fully to match that of another language, he believes that it is possible to match to some extent an item in one language with an item in another language by 'negotiation of context' (Givón 1989:365). What negotiation of context aims at is sufficient overlap in points of view which will temporarily 'do the job' in the particular context. The reason why Givón believes this is possible is because he does not think that each language provides a single consistent world-view. He believes that an individual or a language community may hold two conflicting world-views, each 'contextually segregated'; that is, they are never used in the same context. By way of example he says that some people, in addition to holding a scientific view on the biochemistry of digestion and metabolism, hold another system of food-beliefs such as the 'you are what you eat' notion, or beliefs in a variety of diet fads which are incompatible with science. Givón claims that as a consequence of this intra-culture, or
intra-individual diversity, it is possible to find sufficient overlap in points of view which would allow for an approximate understanding of the SL by the TL audience. He suggests a balance between cultural universality and cultural specificity:

'The Platonic quest for 'exact' complete translation remains a mirage. But partial sharing of experience ---and the enlargement of one's context through contact with other points of view---has always been the norm within, as well as across cultures.' (Givón 1989:365, original emphasis)

3.2.4 Summary of the Criticisms of Katz’s Determinacy Thesis

Although Keenan, Grace, and Givón all disagree with Katz’s DT, their reasons are quite different. Keenan’s basic argument against the DT is that it is not always the case that a single sentence in one language can be translated exactly into a single sentence in another language. He requires that the DT be modified to state that any thought can be expressed 'with enough precision for efficient communication' (Keenan 1978:164) in any language. However, he does not cast any doubt on the basic assumptions about language made by Katz. Katz’s view of language stems from the container view in that he believes that sentences contain meanings which can be defined independently not only of the language user, but even independently of any particular linguistic form. To Katz, languages are containers which encode a fixed set of universal meanings. Since all languages encode the same set of

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5 The implication this has on translation is that new concepts can be introduced and understood.

6 The word ‘meaning’ used here is equivalent to what Katz calls ’propositions’.
universal meanings, translation is a more or less mechanical process of extracting the meaning from its container and placing it in another container. Keenan points out that what is contained in one container in one language may have to be placed in more than one container in another language, but otherwise he shares Katz's assumption about the nature of meaning.

Givón's (1989) first argument against the claim present in Katz's DT is along the same lines as Keenan's. However, Givón is not satisfied with Keenan's weaker version of Katz's DT. This is because he believes that each language has its unique, highly structured lexical network and that the items in the network cannot be isolated and can only be defined within the network. What Givón means by 'network' or 'context' includes not only discourse or text context, but also the shared world-view, i.e., the knowledge of and the beliefs about the physical and cultural universe shared by the members of a speech community. He believes that language, particularly its vocabulary, is deeply entrenched in such context, which is to a large degree unique to the language community. Thus, he rejects the universalism advocated both by Katz and by Keenan, which trivialises the cross-linguistic differences in context.

Note, however, that in his argument against extreme cultural relativism Givón advocates what Grace calls the 'perlocutionary intertranslatability claim'. Although Givón does not believe that for anything that one wants to
communicate it is always possible to find a way to make the TL audience understand it completely, he does claim that it is possible to make the TL audience understand approximately whatever one wants to communicate. For Grace, who does not think that it can be clearly tested whether the TL audience has understood what the SL speaker intended, the perlocutionary intertranslatability postulate is problematic.

Grace's argument against Katz's DT raises some fundamental questions about the nature of language. The assumptions about language which Katz makes in his DT reflect what Grace (1987) calls the 'mapping view' of language. On this view, there is a common world which is represented or 'mapped' by all languages. Although Givón does not make this assumption, and although he claims that each language maps its own version of the world, he does believe that the diversity of world-views which an individual or a group of people can hold indicates that partial sharing of experience allows for sufficient understanding between members of two language communities. As Grace points out, whether two people from different language communities have indeed understood the same thing is difficult, if not impossible, to determine. However, it is possible to examine to what extent language reflects a particular view of the world and whether or not this view is shared by other languages.

In the next section, I will discuss Grace's (1987) 'reality-construction view' of language, according to which we construct an incomplete view of the world through our
perception, and it is this view that we encode in language. Grace's view of language will be compared with Katz's, and it will be Grace's view of language which will become the basis for the discussion in the next chapter.

3.3 The linguistic construction of reality

Grace (1987) discusses two distinct views of language. One he calls the 'mapping view', and the other he calls the 'reality-construction view'. The mapping view of language, which leads directly to the locutionary interpretation of the intertranslatability postulate, assumes that there is a common world which is represented or 'mapped' by all languages. In contrast, the reality-construction view, advocated by Grace, assumes that the reality which is represented by language is not an objective reality represented equally by all languages, but a particular version or 'model' of reality as perceived by its language users. In order to understand how each language constructs a model of reality, we must first understand what Grace sees as the nature of linguistic signs.

3.3.1 The nature of linguistic signs

Grace (1987) describes the nature of linguistic signs by making the following distinctions:

(a) sentence-level vs. word-level signs
(b) ad hoc vs. conventional signs
(c) motivated vs. unmotivated signs

A linguistic sign can either be a single word (a word-level sign), or it can be a sentence (a sentence-level sign). A word-level sign or a sentence-level sign can be conventional
or ad hoc. Conventional signs are signs which are established in the language. They are stereotypical or commonplace expressions which occur repeatedly in the language and which are available ready-made when we want to express a commonplace idea. Word-level conventional signs are the vocabulary of the language; sentence-level conventional signs include idioms, clichés, and catch phrases.

Ad hoc signs are signs made up by the speaker for temporary use when she is unable to find an established sign which refers to the concept she has in mind. This is done by putting together words or morphemes which the speaker thinks would best characterise the concept she has in mind. Examples of ad hoc signs that Grace (1987:83) gives are the following:  

(11) The woman I saw you with last night
(12) a house with three bedrooms and two baths which is not too far from where we work and is in the medium price range

In neither case does English have a conventional sign just for the particular referent, but it does provide the necessary lexical and grammatical means for constructing appropriate ad hoc signs.

Because an ad hoc sign provides the speaker's characterisation

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7 Examples (11) and (12) are word-level ad hoc signs in that they function in the same way as words.
of a particular referent, it is said to be 'completely motivated'. What Grace means by the phrase 'completely motivated' is that the sign has 'no special meaning which a speaker needs to learn over and above the meaning contained in the meanings of their parts' (Grace 1987:86-87). Some conventional signs are also completely motivated. Examples of completely motivated conventional signs given by Grace (1987:86) are clichés such as casual remark, the discerning reader, inevitable consequences, irreparable loss, and catch-phrases such as I'm a stranger here myself. All these phrases are conventionalised in English in the sense that they are recognised by the speakers as familiar expressions; at the same time, the phrases are completely motivated in that the meanings of the whole phrases are nothing more than the characterisation provided by the meanings of their constituents.

In contrast, if the meaning of a linguistic sign cannot be understood from the meanings of its parts, then the sign is said by Grace to provide no characterisation of the concept it refers to and is therefore 'completely unmotivated'. Completely unmotivated signs are the unanalysable words in the language whose form-meaning relations are completely arbitrary. Examples of completely unmotivated signs given by Grace (1987:84) are the English body part terms head and foot: 'as far as we can see, the foot might just as well have been called head, and the head, foot' (Grace 1987:84).

In between completely motivated signs (which include all ad
hoc signs and some conventional signs) and completely unmotivated signs (which are always conventional), there are signs which Grace refers to as 'partially motivated'. Partially motivated signs are conventional signs which, like completely motivated signs, provide characterisations of the concepts they refer to, but the characterisations are only partial. In other words, 'knowing the meanings of the constituents is not enough to permit one to use and understand such expressions in the way that a fully competent speaker of the language does' (Grace 1987:86). A partially motivated conventional sign can be morphemically simple, or it may be assembled out of two or more parts. Characterisation by means of a single element consists in extending an existing meaning of a word to refer to a concept which is somehow comparable to the existing meaning. Examples given by Grace (1987:87) are: head (of a bed), foot (of a bed), foot (of a mountain). In these cases, the meanings of the body-part terms foot and head have been extended from referring to the body parts to referring to concepts which are comparable to these body parts. Partial characterisation of a concept can also be made by putting together two or more morphemes, as in football, pineapple, or by making up new words using Greek or Latin parts, e.g. anthropology, automobile, condominium (cf. Grace 1987:88). Finally, a partially motivated conventional sign can be lexemically complex. All idioms are partially motivated conventional signs in that their meanings cannot be completely determined from the meanings of their parts. Grace (1987:88) gives the following examples: White House, House of Representatives, to ground out, sacrifice fly,
infeld fly rule, grade point average. All such idioms provide an incomplete characterisations of their meanings, though they differ with respect to how effectively the characterisation suggests the meaning.

The following diagram shows that while conventional signs can vary from being motivated to unmotivated, ad hoc signs are always motivated:

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motivated ← partially motivated → unmotivated
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<table>
<thead>
<tr>
<th>conventional signs</th>
<th>+</th>
<th>+</th>
<th>+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(inevitable consequences)</td>
<td>(to be in deep water)</td>
<td>(foot)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ad hoc signs</th>
<th>+</th>
<th>-</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(the woman I saw you with)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.3.2 The construction-of-reality models

We may note from the above description of linguistic signs that unmotivated word-level conventional signs are the only kind of linguistic sign which do not provide some sort of characterisation of the concept they refer to. Unmotivated word-level conventional signs are the kind of signs which Saussure (1959 [1915]) characterised as having an arbitrary relation between their form and their meaning. Grace (1987), on re-examining the nature of the linguistic sign, notes that beyond the level of unanalysable words, i.e. at the level of morphologically complex words, and at the phrase and the sentence levels, linguistic signs provide particular characterisations of reality. The following example is taken from Vinay and Darbelnet (1958:89), whom Grace refers to
The word *folder* is a motivated conventional sign based on the unmotivated conventional sign *fold*. We can assume that the word *folder* is motivated. The association of the form *folder* with the form *fold* suggests the nature of the concept 'folder' and how the object is perceived. It is easy for an English speaker to imagine that the creation of the English word was motivated by the perception of the object *folder* as something that folds. However, the characterisation provided by the word *folder* is not an exact reflection of the external reality. It represents only a particular interpretation of the reality it refers to. One need only look at the way another language characterises the same reality in order to see this. The normal translation of *folder* in French, according to Vinay and Darbelnet (1958:89), is *dépliant*. Like the English word *folder*, the French word *dépliant* is a motivated sign. It is based on another motivated sign *déplier*, which is made up of the two unmotivated signs *dé-* 'un-' and *plier* 'to fold'.

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8 Note that this association of the concept 'folder' with the concept 'fold' is different from associating the concept, say, 'Japan' with the concept 'car'. Although in both cases one concept is evoked by the other, the association between 'Japan' and 'car' is made strictly by the individual; although the association between 'folder' and 'fold' was at some point in history also made by an individual, this association is now built into the language whereas the association between 'Japan' and 'car' is not.

9 Note the two different uses of the word *reality* by Grace: one is the 'reality' or 'common world' which has an objective existence independent of any observers. In the mapping view, it is assumed that this 'common world' is 'mapped' by all languages, although languages may differ as to the way in which they divide up the common world. The reality-construction view, on the other hand, claims that what is represented in language is not the common world, but the objects, situations, states, or acts in the common world *as we perceive them.*
case of English, the association of the word dépliant with the word déplier suggests how the object is perceived. A French speaker is likely to assume that the word dépliant originated because the object was seen as something that opens. Both English folder and French dépliant are motivated, but they characterise the object in different ways.¹⁰

This difference in points of view represented in English and French makes us aware that one cannot assume that the fit between reality and its representation in language is sufficiently close that one can predict one from the other even in the case of motivated signs. There is no mechanical process in which one can connect reality with its representation in a language. Language is not an encoder of reality but an encoder of a particular conceptualisation of reality. Grace calls the particular segment of reality highlighted in a language 'a model' of reality (Grace 1987:6).

At the word level, a word can provide a model of reality by providing some sort of characterisation of the reality (real or imaginary) by combining words or morphemes. The characterisation projects a particular view shaped by the culture and history of the language users. Over time, the particular view projected by the characterisation becomes the

¹⁰ Vinay and Darbelnet (1958:89) refer to these differences in point of view or differences in highlighting in languages as differences in 'modulation'. The reversed points of view in French and in English represented by the forms folder and dépliant are called 'fixed lexical modulations' by Vinay and Darbelnet (1958:88). They are fixed in that although the processes through which the words were created involved different points of view, the words are now established in the respective languages and the points of view are no longer evoked by the words. Vinay and Darbelnet write (1958:51) that 'we have representations of the same reality in different light'.
accepted or standard way in which the language users talk about such reality; the characterisation has become lexicalised.

An aspect of a model of reality constructed by a partially motivated conventional sign can be observed in the example *to hit the sack*. It is an idiom which highlights one aspect of the act of going to sleep.\(^\text{11}\) If we can imagine that the sentence *John hit the sack* was used to describe an actual event, we can imagine that there was a man whose body hit a sack on which he was about to lie down and sleep. We know, however, that there was much other sensory information available to the speaker of the sentence such as John's act of lying down, closing his eyes, and there were probably also many other things near John other than the sack. These things, however, have been ignored, and the speaker has selected one aspect of the event to characterise it. Over time, the aspect by which the speaker chose to represent the event has come to be established, and in present-day English, *to hit the sack* is a conventional sign.

Grace's (1987) claim is that each language has its own set of motivated conventional signs which form models of the world projected by the particular language.\(^\text{12}\) These models of

\(^\text{11}\) Go to bed is another idiom in which the act of going to sleep is characterised by a different selected aspect of the act.

\(^\text{12}\) Each motivated conventional sign is a conceptualisation or a 'model' of an aspect of reality, but it is doubtful that all the motivated signs put together form a coherent whole model of reality.
reality are, to a large extent, self-contained in that they are shaped by the culture and the history of the language users. The traditional view where some sort of objective meaning or reality is assumed to correspond to each linguistic form becomes untenable.

The existence of conventionalised motivated signs which provide particular interpretations of reality poses significant problems for the notion of translation equivalence. If, as Grace claims, a pair of words from different languages are said to be translation equivalents only if the two words represent the same external reality, we can no longer say that dépliant is the translation equivalent of folder, because the two words do not equally represent the same reality; they could be said to represent the same reality only if they characterised the external reality in exactly the same way. Nor can we say that they are translation equivalents because they have the same meaning, because their meanings are characterised by the meanings of the constituent morphemes. Thus, we are left with no objectively given reality or set of meanings onto which every language can hook and which will enable us to consider them translation equivalents.

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13 This is not to say that unmotivated conventional signs do not pose any problems for translation. A signification which has an unmotivated lexification in one language will not necessarily have an unmotivated lexification in another language. It may have a motivated lexification, or it may not be lexicalised at all. Thus, the matching of unmotivated conventional signs is not a mechanical process.
3.3.3 The mapping and the reality-construction views of language

Grace (1987) rejects Katz's (1978) basic assumption that sentences encode or 'contain' objective meanings. There are no objective factors which all languages hook onto and which can be said to be held constant in translation. Grace's claims which conflict directly with Katz's assumptions are:

a) the meanings of the constituents characterise the meaning of the whole sentence (the inseparability of meaning and form);

b) there is no principled way in which one can distinguish meaning from culture;

c) there is no objectively given set of meanings common to all languages; to some extent, each language has its own set of meanings that is a product of its history.

This alternative picture of language envisages translation to be totally different from Katz's view. Since for Katz sentence meaning is held constant in translation, and all meanings can be equally well rendered in all languages, sentence meaning is independent of any sort of form. The assumption of independence of sentence meaning from sentence form is rejected by Grace in (a) above.

In his discussion of the difference in connotation of the words black and nigger (cf. Section 2.3.2), Katz makes a distinction between 'narrow concepts' and 'broad concepts', 'the former being the sense of words, expressions, or phrases in the language ... and the latter being the stereotype that emerges from the beliefs we have about the referent of a word, expression, or phrase' (Katz 1978:229). According to Katz, whereas in every translation there must be a matching of 'narrow concepts', the matching of 'broad concepts' occurs
only in the tightest translation relation in the hierarchy.

If, as Katz claims, different levels of translation equivalence can be obtained from the preceding level by the additional matching of 'broad concepts', then he must assume that what are the senses of words, phrases or sentences and what are the stereotypic concepts are clearly distinguishable. This clear distinction between linguistic meaning and the beliefs associated with the referent of the linguistic expression is rejected by Grace in (b).

(c) is a rejection of what Katz states in his Effability Principle. Katz does not claim that all sentence meanings are encoded in every language, but he claims that whatever any language encodes will be derived from the same set of sentence meanings. Grace's rejection of a common set of meanings which all languages are able to encode shows similarity to Quine's Indeterminacy Thesis, discussed in 2.3.1. Both views hold that there is no objective measure in which a pair of sentences from different languages can be said to be translation equivalents of each other. However, Grace and Quine differ as to what they mean by translation equivalence. Grace insists that unless two linguistic signs from different languages provide identical characterisations of the external reality, the two signs cannot be considered to represent the same reality and therefore cannot be translation equivalents. Quine, on the other hand, claims that if a pair of observation sentences from two different languages are used in the same observable situation they can be considered to be translation
equivalents. This idea would not be shared by Grace because, according to him, the observable situation does not dictate completely the way in which we characterise the situation.

3.3.4 The implications of the reality-construction view of language on translation theory

Grace’s argument against Katz’s view of language has significant implications for translation theory. Most translators and interpreters will probably find Katz’s claims difficult to accept and will be in sympathy with Grace’s claims. Having worked as a translator and an interpreter myself, I find that Grace’s views reflect my own practical experience. In translating or interpreting, I have noticed that certain concepts for which the SL has ready-made phrases are often awkward to express in the TL; or that the differences between the languages in their conventional characterisations of reality require me to detach myself from the SL characterisation in order to come up with a characterisation in the TL. It is because of this fit between Grace’s views of language and my own experience as a translator that I have adopted his reality-construction view of language. I will explore further the nature of conventional signs in the next chapter.

Having adopted Grace’s reality-construction view of language, we may ask the following question: If languages are inherently not intertranslatable, how is it that we continue to practice translation? The answer that Grace (1987:69) gives is based on Quine’s (1960) observation. Grace believes that Quine is correct in stating that translation between
languages can be made possible not because the languages share some common propositions or meanings, but because the speakers of different languages share similar cultures. Grace (1987:69-70) puts it this way:

We can quite appropriately speak of a constructed reality shared with minor variations by the speakers of all of the European languages---a constructed reality of Western culture. But today, this 'Western' culture has expanded to embrace almost the entire world---it might more appropriately now be thought of as simply the culture of the modern world. That is, translation is possible because the constructed reality of the dominant 'Western' culture has engulfed the constructed realities of most other cultures to the extent that the differences in constructed realities of the modern world have become reduced to minor variations. We may compare this view with Givón's explanation as to why approximate match of meaning is possible. As mentioned in Section 3.2.3, Givón argues that there can be sufficient inter-language overlap in world-views to allow for translation not because there is a single consistent world-view which encompasses all linguistic and cultural communities, but because an individual or a language community can maintain two or more segregated but conflicting world-views. Thus, in order to explain the extent to which translation succeeds, Grace postulates an all-encompassing modern world-view, while Givón assumes multiple world-views in each language community,

14 For this reason, Quine proposes 'radical translation', i.e. translation between two languages which have not had any contact or cultural exchanges, as the only way in which to show that there is no universal meaning encoded in all languages.

15 Givón's term 'world-view' corresponds to Grace's term 'constructed reality'.
some of which may overlap with some of the world-views held in another language community.

In this thesis, I will be proposing a third view, different from those of Grace and Givón, a view based on the distinction made by Lakoff (1987:310) between a 'conceptual system' and 'conceptual capacity'. The reality constructed by language which Grace talks about is the conceptual system of the language. The conceptual system is constructed through the way in which the language conventionally characterises reality. However, just because a particular characterisation is conventionalised in the language, it does not mean that the language users in that community cannot see the same concept in another light, that they cannot provide or understand a different characterisation. This is possible because of the shared 'conceptual capacity' of language users.

I will explore the nature of this conceptual capacity in Chapters 5 and 6 and will propose that it is because of this conceptual capacity that translation succeeds to the extent that it does.
4. CONVENTIONAL SIGNS AND TRANSLATION

4.1 Introduction

Having presented an outline of Grace's reality-construction view of language in the previous chapter, I will now examine in detail some of the issues in the reality-construction view. The purpose of this exercise is not to criticise Grace's view. I have adopted Grace's basic insights but will discuss some of the issues in more detail and will expand the definitions of some of his notions in order to explain the difficulties in translation.

The first issue taken up in this chapter is that of variation. Two kinds of variation concerning a conventional sign will be discussed. First, whether or not the meaning of a linguistic sign is motivated or not will depend on whether the language user perceives a link between the meaning of the linguistic sign and the meanings of its constituents. This will vary from speaker to speaker and may change over time even for one speaker. Whether the meaning of the linguistic sign is considered motivated or not within the language community will depend on the number of speakers who perceive a link between the meaning of the sign and the meanings of its constituents, and this also is liable to change over time.

Second, which linguistic signs are considered to be conventional will vary from one language sub-community to another and also to a lesser degree from speaker to speaker.
Following this, I will discuss the formation of conceptual categories and will argue that the formation of conceptual categories encoded in linguistic signs can be explained in terms of the kinds of experience encountered by the creators of the signs.

The next issue taken up in this chapter is the two levels of unpredictability: (a) the unpredictability of how people will perceive a phenomenon that belongs to one domain of experience as being similar to a phenomenon that belongs in another domain; (b) the unpredictability of which linguistic form used to encode a category of experience will become established in the community.

This will be followed by a discussion of the consequences which the two types of unpredictability have for the understanding and use of the language by an outsider who does not share the experiences of the members of that language community. This discussion will proceed in two parts: part one will deal with the difficulties encountered by an outsider without considering the background of the outsider’s experiences; part two will deal with how the outsider’s background experiences interfere with her understanding and use of a language other than her own.

4.2 Variation

In the following two sections, two kinds of variation concerning the linguistic sign will be discussed. One is the variation among speakers concerning what is perceived as a motivated meaning, and the second is the variation among
speakers concerning which signs they consider to be conventional.

4.2.1 Variation in the perception of motivatedness

In the previous chapter we saw that Grace's definition of motivatedness has to do with the relation between the meaning of a complex expression and the meanings of its constituents. Grace equates the meanings of the constituents with the characterisation which the linguistic sign provides, and he says that a sign is completely motivated if 'it does not mean anything more than what its characterisation says' (Grace 1987:84). A linguistic sign is partially motivated if 'knowing the meanings of the constituents is not enough to permit one to use and understand such expressions in the way a fully competent speaker of the language does' (Grace 1987:86). In other words, the meanings of the constituents only suggest by an incomplete characterisation what the meaning of the whole expression is. A completely unmotivated linguistic sign is one which has no characterisation, i.e. a sign which is unanalysable into words or morphemes which would allow the language user to predict the meaning of the whole expression.

Grace's notion of 'motivatedness' brings up the existence of varying degrees of motivatedness depending on how effectively the language user thinks the meaning of the whole expression is suggested by the meanings of the constituents.

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1 I will argue in Chapter 5 that what the hearer understands from a linguistic expression is always more than the concatenation of the meanings of its constituents and its structure.
Speakers' judgements may vary when they are asked whether the meanings of the constituents of the phrase *to be in deep water* more effectively suggest its metaphorical meaning compared to the way in which the meaning of *foot* as a body-part term suggests its extended meaning in the phrase *the foot of the mountain*. A conventional sign can be motivated in many ways. In the expression *the foot of the mountain*, a term for a body part is being used to refer to a particular area of the mountain. The location of the foot in relation to the rest of the human body is projected onto the mountain to suggest a particular area; the use of the word *foot* is motivated. The expression *to be in deep water* characterises a troublesome or difficult situation by referring to a situation at sea where swimming or sailing can be dangerous. In such cases, the general claim about the partial motivatedness of the conventional sign may hold true for each speaker, but where the particular conventional sign falls on the continuum of motivatedness may differ among speakers.

Speakers may also differ as to how they interpret the meaning of a particular constituent in a conventional sign, and this may affect the way in which they relate the meanings of the constituents to the meaning of the whole expression. Lakoff (1987:451) points out that the meaning of *moss* in the English proverb *A rolling stone gathers no moss* is negative for some people: an encumbrance; so the expression as a whole means 'if you move around a lot, you do not get tied down'. For others, the meaning of *moss* is positive: a symbol of status or wealth accrued by staying in one place; so the expression as a whole
means 'if you move around a lot, you do not accumulate much wealth'.

Another case in which different interpretations of the meanings of the constituents affect the way in which speakers relate the meanings of the constituents to the meaning of the whole expression can be observed when one of the constituents is homonymous with another word, and different meanings are assigned to the constituent by different speakers. For example, the word kata in the Japanese metaphorical expression kata nashi used in the following sentence means 'shape', but it is homonymous with another word which means 'shoulder'.

(1) Sore de wa kare-ga kata nashi desu
    that COP-TOP he -SUB shape non-existent

    literal meaning: 'That being the case, he is no shape'
    metaphorical meaning: 'If that is the case, he will lose face'

The Chinese character used for the word kata in the dictionary entry for kata nashi indicates that the correct meaning of kata in the expression is 'shape'. Thus the meaning of losing one's face is suggested by relating the state of a person to the state of something that has lost its original shape and has become useless.

However, if the etymology of the metaphorical expression is not known, kata can be interpreted to mean 'shoulder'. Kata 'shoulder' has a metaphorical usage as in

\[2\] Images associated with words will be discussed in Chapter 5.
(2) kata gaki
shoulder writing
'(a person's) title'

The reason why it has this meaning is that when written vertically on a business card, a person's title is written on the top right hand side of the person's name in Japanese; in other words, if the business card is looked upon as a human body, the position of the title is around the shoulders. Because of this association of the word kata with 'title', many speakers of Japanese mistakenly interpret the meanings of the constituents of kata nashi to mean 'no title'. Thus, the metaphorical meaning of the expression, 'to lose face' is suggested by relating the state of a person who has lost face to the state of a person who has lost her title.3

Since motivatedness is determined by the individual language user's perception of the relation between the meaning of a complex expression and the meanings of its constituents, we must first note that to say that a linguistic sign is or is not motivated is a shorthand expression for saying that the meaning of the linguistic sign is perceived by a language user as being or not being motivated by the meanings of its constituents. The perception of the individual language user is also liable to change over time; for example, when the allusion is pointed out to her, the individual may start to perceive the relation between the meaning of an expression and

3 Note that whereas the different interpretations of moss in A rolling stone gathers no moss result in the proverb being used in different contexts, the different folk etymologies assigned to kata in kata nashi do not affect the way in which the expression is used.
the meanings of its constituents. The number of people who perceive the relation may also change over time. Also, since perception can vary among the language users, there will not be complete agreement in one language community as to whether the constituent meanings of an expression suggest the meaning of the whole expression.

4.2.2 Variation in conventional signs

Although conventions are sometimes thought of as agreements, Grace uses the term 'convention' to mean something that is like a custom, the norm, or that which is institutionalised. It is not the case that speakers of a language actually agree with one another to abide by some rules of language, but there are certain linguistic expressions which a native speaker would recognise as established units. I believe that the ability to recognise certain linguistic signs as established units is acquired by the language user through her linguistic experiences. If a linguistic form is encountered over and over again as part of a recurring context, one is likely to anticipate such a form when one next encounters the same context. An expression which fits the anticipation can be said to be a conventional sign.

By defining a conventional sign in terms of the language user’s experience, we introduce the idea that what is considered to be a conventional sign may differ from speaker to speaker according to their experiences. This, I think,

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4 My claim here is based on Schank and Abelson’s (1977) ‘episodic’ view of memory, according to which memory of words is organised around personal experiences or episodes.
fits the reality of the matter. Most people in a language community share similar experiences and thus have similar anticipations of what might occur in a given context. However, within a language community there are groups of people who share experiences not shared by others. Computer specialists, for example, share conventional signs not necessarily shared by others. Such people with expert knowledge are bound to have a large set of expressions pertaining to computers which they use repeatedly and which they anticipate in particular contexts. Similarly, the linguistic forms anticipated in a given context by someone from one social class may differ from what someone from another social class may anticipate. This means that people with different domains of experience will have, to some extent, different sets of conventional signs. However, there will be significant overlap among the conventional signs for all the speakers of a language because many of the contexts in which particular linguistic forms are anticipated will recur in the experiences of most of the speakers. This set of conventional signs which are shared by the majority of speakers is what I will refer to as 'the conventional signs of a language community' in the remainder of this thesis.

4.3 An expanded notion of motivatedness
Grace's notion of motivatedness has to do with the relation between the meaning of a complex expression and the meanings of its constituents. It calls into question Saussure's notion of the arbitrary relationship between the
'signification' (i.e. the concept), and its 'signal' (i.e. its sound pattern, which is the hearer's psychological impression of a sound) (cf. Saussure 1959 [1915]). According to Grace, unanalysable word-level conventional signs are completely unmotivated and thus arbitrary, but most, if not all, complex linguistic signs are either partially motivated or completely motivated.

In the subsequent section, I will present Grace's discussion of the formation of conceptual categories and will argue that although the relationship between the concept of a word-level conventional sign and its sound pattern remains arbitrary, the existence of the word-level linguistic sign in the community is by no means accidental and can be explained by, and is 'motivated' by, the perception of the conceptual category encoded in the linguistic sign by its creator. The use of 'motivated' here is somewhat different from the use of the same word by Grace. I am not talking about a linguistic characterisation which motivates the meaning of a linguistic expression; rather I am talking about the perception of a category which explains the creation of a linguistic sign. Such a claim would be vacuous and purely speculative unless independent evidence explaining the formation of conceptual categories could be found. I will present extra-linguistic evidence which motivates the formation of conceptual categories of sibling terms in Japanese.

4.3.1 The formation of conceptual categories
Grace (1987:80), in his discussion of the origins of language,
writes that the first stage in the formation of conceptual elements is the acquisition by the people of the ability to perceive similarities between physical objects, or between acts, between states, between processes, etc. in different situations. This ability enables the people to formulate the notion of 'kinds', i.e. a group of objects, for example, which have recurred in the people’s experience and which the people have come to perceive as similar. With the emergence of language, such 'kinds' become the meanings of word-level conventional signs.

The above account by Grace on how language got its conceptual elements indicates that the existence of particular word-level conventional signs is motivated by the people’s perception of objects, states, individuals, acts, etc. This means that one group of people may conclude that some objects which they experience repeatedly form a 'kind', but another group of people may not experience the same set of objects repeatedly, or even if they do, they may not perceive a similarity in the objects to consider them as forming a 'kind'.

This is the case with different languages. What becomes a conventional sign varies from language to language. This, I think, is because the physical objects, individuals, acts, states, processes, etc. which recur in the experiences of the members of one community may be lacking as a recurring experience for members of another community; and/or because even if the things (objects, individuals, acts, states, processes, etc.) recur in the experiences of the people in
both communities, what things are perceived by the people to be similar enough to form a kind, or what things are different enough to form two separate kinds differs from one community to another.

The first reason gives rise to the existence of words like genkan in Japanese for which there is no corresponding conventional sign in English. The concept of genkan has to be rendered in English by an ad hoc sign such as (3):

(3) 'an architecturally defined area just inside the entrance of the house designated for taking off and putting on one's shoes'

The reason why English does not have a conventional sign corresponding to the Japanese word genkan is due to the fact that in English speaking communities houses do not normally have a well defined area designated for taking off and putting on shoes, and so the concept is not experienced by its speakers repeatedly. In other words, if the physical object or institution does not exist in a community, it will not be part of the experiences of the people in the community. This means that no concept for it will be formed, and therefore no linguistic sign for the concept will be created.

The second reason for the difference in conventional signs is that even if the physical objects, individuals, acts, states, processes, etc. exist in both language communities, how the members of the two communities perceive such things may differ. This difference in perception by the members of the two communities has been the topic of many studies (see e.g. Givón 1978, Higashi 1981, Kunihiro 1981). In discussions of
translation equivalents and in cross-linguistic studies of
lexical items, one often comes across paradigms of lexical
items such as (4):

(4)  male  kyoodai  ani  
     brother   older brother  
                 otooto  younger brother  
        sibling  
                 female  shimai  ane  
                          sister   older sister  
                          imooto  younger sister

In this paradigm, words in Japanese and in English are paired
together by features such as 'sibling', 'male', 'female',
'older', and 'younger'. Although the paradigm presents a
very neat structure, it fails to capture what motivates the
difference in lexicalisation in the two languages.

One needs to ask why there is a word-level conventional sign
for 'older brother' in Japanese but not in English. The
assumption here is that conventional signs---be they single-
word or multi-word---serve to encode particular experiences
shared by the people in the language community.

When considering whether the Japanese terms in (4) are
translation equivalents of the English terms listed below
them, it must be noted that the Japanese words ani, otooto,
ane and imooto are commonly used words, whereas kyoodai and
shimai are not normally used unless the speaker does not know
whether the brother or sister is older or younger. If the
speaker does know whether the brother or sister is older or
younger, she will normally use the age-specific terms. On
the other hand, in English, brother and sister are commonly used words, but the phrases older brother, younger brother, older sister, younger sister are not normally used and are ad hoc signs put together only for the occasion when it is crucial to the discourse that the age hierarchy of the siblings be specified.

An added difference between the Japanese and the English words is that the Japanese words in the paradigm are used only when referring to one's own brothers or sisters—they are humble forms. When referring to someone else's brothers or sisters, one must use the honorific forms which comprise a parallel set of four forms derivationally related to the basic forms ani, otooto, ane, imooto:

(5) o- nii ________-san
     HON-older brother-HON 'older brother'

     otooto ________-san
     younger brother-HON 'younger brother'

     o- nee ________-san
     HON older sister-HON 'older sister'

     imooto ________-san
     younger sister-HON 'younger sister'

The humble forms in (4) are used only to refer to one's own brothers and sisters; the honorific forms in (5) are used either to refer to the siblings of someone outside of one's own family or in-group, or the honorific forms for older brother and older sister are used as terms of address by the younger siblings.

What motivates the existence of the age-based opposition in the Japanese sibling terms is the way in which traditionally
the oldest son or the oldest daughter is perceived as having a totally different role from the younger children in traditional Japanese society. This background makes people in Japanese society perceive older brothers and younger brothers to be different enough to assign them to two separate categories. Moreover, the categories represented by the different forms used to refer to one’s own brothers and sisters and someone else’s brothers and sisters are motivated by Japanese society emphasising the distinction between one’s in-group and out-group, and by emphasising politeness.5

Further evidence to support the assertion that the age based opposition of Japanese sibling terms is motivated by the importance of age distinction among siblings in Japanese society can be seen when one considers the use of the sibling terms with in-laws. The above mentioned sibling terms are also used to refer to brothers-in-law and sisters-in-law. However, in the case of in-laws, the age distinction between the in-law and the sibling of his/her spouse is overridden by the age distinction between the spouse and his/her siblings. Whether your in-law is your older sibling or younger sibling depends on your spouse’s age relationship with his/her siblings. For example, I am the younger out of two sisters in my family. Even if my husband were older than my older sister, he would have to refer to my sister as his ‘older sister’ by using the term ane, or o-nee-san, because he would

5 It must be emphasised that although we may be able to find a reason for the people in Japanese society to perceive age-based categories for siblings, the relationship between the perceptual categories and the linguistic forms used to represent the categories remains arbitrary.
be related to my older sister through me.⁶

These factors indicate that the experiences encoded in the Japanese words are different from those encoded in the English words. Once categories of experiences are encoded in a language in the form of conventional signs, the language perpetuates the perception of the categories by its users. Grace writes:

Not only is language the means by which this kind of reality construction is accomplished, it is also the means by which the realities, once constructed, are preserved and transmitted from person to person and from generation to generation. (Grace 1987:3)

The differences in categories of experiences established in the language by means of conventional signs become important in translation. When translating from English to Japanese, it is often unnatural to translate brother as kyoodai 'brother', in which case it is necessary for the translator to judge from the context whether the word refers to an older brother or a younger brother. When translating from Japanese to English, it is often unnatural to translate ani as older brother and is best left simply as brother. Here, the translator has to judge whether the seniority of the brother is relevant to the text or not. What causes the unnaturalness in English of specifying the age distinction in sibling terms is the lack of motive. There is no feature of English speaking society which makes its members perceive older brothers as being distinct enough from younger brother to make it worth making the distinction.

⁶ I am indebted to W. Lawrence for pointing this out to me.
The drawback of the paradigm presented in (4) is that it ignores these differences. In the language-as-container framework, there is no place for psychological motivation because linguistic signs are treated as mere containers for meanings which are considered to exist objectively and independently of the language user; and the differences in conceptual elements, and the differences in word-level conventional signs are seen as differences in the ways in which languages cut up the objective meanings. The view adopted here is that meanings do not exist objectively, but are the result of people's perception of objects, individuals, states, acts, processes, etc., i.e. the perception of their experiences. In this view, the creation of all unanalysable word-level conventional signs in a language would be considered motivated.7

4.4 Two levels of unpredictability

Explaining why certain concepts are encoded into linguistic forms in a particular language community, or figuring out what motivates the combination of certain words in a multi-word conventional sign is different from being able to predict which concepts will be encoded into linguistic forms, or being able to predict which combination of words will become established in a given language community.

7 The use of the word 'motivated' here is different from Grace's (1987) notion of 'motivated' which is based on the relation between the meaning of an expression and the meanings of its constituents. The word 'motivated' is used here to mean that some reasons can be found which explains the existence of a conventional sign in a language.
I see two levels of unpredictability concerning conventional signs. One is the unpredictability of how people in a community categorise their experience. What aspect of a phenomenon the people may seize on to say that it is similar to another is unpredictable. This is because what people may perceive as forming a category of experience or how people may characterise the experience has wide possibilities. After a linguistic form becomes established, however, we can find an explanation for why the form may have become established, because although how people categorise their experiences is ultimately unpredictable, there is usually, if not always, a reason, or a motivation for the way in which people formulate categories.

The other level of unpredictability is the unpredictability of which linguistic sign will become established, or whether any linguistic sign will become established to refer to a particular category. Even when a conceptual category is formed, the language may not respond immediately to encode the conceptual category. It may be that for some time the concept has to be referred to clumsily by different ad hoc signs until a particular linguistic sign becomes established. And when there are several candidate signs to represent a conceptual category, we cannot predict which one will become established in the community. What will be adopted by a language community may be purely accidental or may be influenced by unpredictable twists of history.

For example, when the word anorexia was first translated into
Japanese, it was translated as shokuyoku fushin-shoo (lit.: 'lack of appetite condition'). Shortly after this expression appeared in the press, a new expression was coined: kyoshoku-shoo (lit.: 'food rejection condition'). Although both seem to characterise the illness equally well, only the latter became established.

How an expression becomes established in the community is not apparent. If the expression is motivated, it may be that the characterisation which the sign provides appeals to many speakers, and the expression begins to be used regularly. It could also be that the person who initially used the expression was an influential figure and many people imitated her manner of speech. Other possible causes of a sign becoming established are internal sound structure, association with other words, etc.

There is no rule which would allow us to predict in the future which signs will become established. Superficially, a conventional sign can look just like an ad hoc sign.\(^8\) As mentioned in Section 4.1.2.1, native speakers know what is an established unit in the language as a result of their experiences in the language community. They learn the conventional signs as they learn to anticipate certain linguistic forms in a particular context recurring in their

\(^8\) There are some conventional signs which can be distinguished from ad hoc signs because they have grammatically irregular forms, or have constituents which are not used in ad hoc signs. Examples of such conventional signs are: by and large, it rained cats and dogs, spic and span, tit for tat, how do you do, long time no see.
In the following section, I will be examining the difficulty which the above mentioned unpredictabilities create for a person who does not share the experiences of the members of a language community.

4.5 What is conventionalised in a language?

In this section, I look at conventional signs from an outsider’s point of view. By an outsider I mean someone who is not a member of a given language community (C) and who knows the language (CL) spoken in community C only through a bilingual dictionary of CL and her own language and through a grammar book of CL. I will firstly, for the sake of the discussion, not consider the fact that this outsider too belongs to another language community. The purpose of this exercise is to highlight what is conventionalised in a language and observe the difficulty in understanding and using CL encountered by an outsider who does not have the same experiences as the people in community C.

4.5.1 Consequences of unpredictability (a)

I said in Section 4.3 that one of the unpredictable factors concerning linguistic signs is that we cannot predict how people categorise their experience. This means that an outsider cannot predict the category of experience which becomes encoded in a conventional sign. If the outsider cannot predict how one domain of experience is perceived as being similar to another domain of experience in a
conventional metaphor, she will not be able to understand the metaphorical meaning of the conventional sign nor be able to produce correct collocations.

Another kind of difficulty due to the unpredictable ways in which people categorise their experience occurs when a conventional sign is used not simply to characterise an object, individual, event, state, process, etc., but is used in particular institutionalised situations to perform particular institutionalised functions. The difficulty arises because how the people in the community perceive one situation as being similar to another situation is not predictable; what function might be called for by the people in the community is not predictable; and how the people might perceive the literal meaning of an expression as being related to the function it performs is also not predictable. These difficulties will be discussed in turn.

4.5.1.1 Category of experience encoded in conventional signs
What category of experience will become encoded either as a word-level conventional sign or as a complex conventional sign is not predictable. This means that a total stranger to community C will not necessarily be able to fully predict from the natural or the cultural environment of community C what word-level conventional signs the community might have. Of course, if a bilingual dictionary of the CL and the outsider’s language is available, the outsider will be able to find out the word-level conventional signs of the CL. However, the idea of dictionary-making is based on the assumption that
meanings of words can be defined objectively without relating them to the language user's experience and that words refer to objects, states, acts, processes, etc., the categories of which are also encoded in the TL. The disadvantage of such an approach to meaning is that the motivation behind the existence of words is ignored. Thus, if the CL were Japanese and the outsider's language English, the dictionary might list the Japanese word ani and 'older brother' as its English equivalent. However, without the knowledge that ani is a humble form motivated by politeness, the outsider might be misled by the dictionary and refer to someone else's older brother as ani. The sign ani is also motivated by the difference in status of the siblings according to age, and the age of the siblings' spouses are over-ridden by the age distinction among the siblings. Without this knowledge, the outsider may mistakenly assume that any older brother-in-law is called ani.

If a word listed in the dictionary has a conventional metaphorical usage based on what the CL speakers perceive as a similarity between what is described by its literal meaning and another phenomenon, the outsider who may not perceive this link may see the relation between the two different meanings as arbitrary. In Section 4.5.1.2 below, I will introduce Lakoff's (1987) and Lakoff and Johnson's (1980) view of metaphors and their claim that to a large degree our conceptual systems are organised metaphorically and that this gives rise to the conventional metaphors and the conventional semantic extensions in our language. Lakoff and Johnson
are particularly interested in metaphorical concepts which systematically influence the use of a range of linguistic expressions, but there are also isolated metaphorical concepts which may only be reflected in one conventional metaphor. To an outsider who cannot predict what the metaphorical concepts shared by the CL speakers might be, both systematic metaphors and isolated metaphors create problems. For this reason, after summarising Lakoff's (1987) and Lakoff and Johnson's (1980) arguments, I will also examine cases of isolated metaphors.

4.5.1.2 Productive and isolated metaphorical concepts

Lakoff (1987:47), like Grace (1987), writes that the meaning of idioms such as to keep someone at arm's length is not arbitrary. He points out that in traditional linguistic theory, if the meaning of the idiom is not predictable from the meanings of its constituents, it has been thought to be arbitrary. However, Lakoff presents a third alternative: motivation. He defines his notion of motivatedness as follows:

The relationship between A and B is motivated just in case there is an independently existing link, L, such that A-L-B "fit together". L makes sense of the

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9 Both Grace and Lakoff state that the metaphorical meaning of an expression is neither arbitrary nor predictable, but relatable to the meanings of its constituents. The difference between Grace's and Lakoff's definitions of 'motivatedness' lies in their foci of study. Grace is interested in arguing against the mapping view and in demonstrating the characterisation of reality which is 'preserved' in the linguistic sign. Lakoff's interest, on the other hand, lies in revealing the conceptual organisation which underlies the meanings of idioms.
relationship between A and B. (Lakoff 1987:448)
The meaning of the idiom to keep someone at arm’s length, according to Lakoff, is motivated in the following way: the meanings of the constituents in the idiom evoke a particular image which includes the height at which the arm is extended, the direction in which the person being kept at arm’s length is facing, the tension in the muscles of the arm, etc. This image is accompanied by knowledge that the purpose of having one’s arm in that position is defense; if the arm were let down, the other person could get close enough to inflict harm. The image evoked by the meanings of the constituents of the idiom is related to the accompanying knowledge by means of two metaphors: INTIMACY IS PHYSICAL CLOSENESS and SOCIAL (or PSYCHOLOGICAL) HARM IS PHYSICAL HARM. Thus, according to Lakoff, what makes it ‘natural’ or how it ‘makes sense’ to English speakers that to keep someone at arm’s length should mean ‘to keep someone from becoming intimate, so as to protect oneself from social or psychological harm’ is the way in which English speakers relate the two domains of experience by way of metaphor.  

In an earlier book, Lakoff and Johnson (1980) discuss the all-pervasiveness of so-called dead metaphors such as I have never won an argument with him or He attacked every weak point in my  

10 The difference between Grace’s and Lakoff’s notions of ‘motivatedness’ can be observed in their discussions of the motivatedness of idioms. According to Lakoff, to keep someone at arm’s length is ‘motivated’ in that metaphorical concepts which link the conventional image associated with the meanings of the constituents on the one hand and the idiomatic meaning on the other can be found. According to Grace, to keep someone at arm’s length is (partially) ‘motivated’ because the meanings of the constituents suggest the meaning of the whole.
argument and demonstrate that underlying such expressions is the metaphorical concept ARGUMENT IS WAR:

ARGUMENT is partially structured, understood, performed, and talked about in terms of WAR. The concept is metaphorically structured, the activity is metaphorically structured, and, consequently, the language is metaphorically structured ... Our conventional ways of talking about arguments presuppose a metaphor we are hardly ever conscious of. (Lakoff and Johnson 1980:5)

Lakoff and Johnson argue that the metaphorical concept expressed by the collocation of two types of lexical items (i.e. lexical items normally associated with arguments and lexical items normally associated with war) is not only linguistic, but also conceptual. The metaphorical concept provides coherence to the collocation of lexical items having to do with arguments and lexical items normally associated with war (e.g. attack a position, indefensible, strategy, etc.). Without the metaphorical concept, each such collocation would have to be explained individually.

What Lakoff and Johnson are interested in is giving an account of the way in which we understand one kind of thing in terms of another kind of thing. They are interested in metaphors which are part of a metaphorical system which is used constantly and which they claim affects our thought processes. They write,

The fact that we, in part, conceptualize arguments in terms of battle systematically influences the shape arguments take and the way we talk about what we do in arguing. Because the metaphorical concept is systematic, the language we use to talk about that aspect of the concept is systematic ... Since metaphorical expressions in our language are tied to metaphorical concepts in a systematic way, we can use metaphorical linguistic expressions to study the nature of metaphorical concepts and to gain an understanding of
the metaphorical nature of our activities.  
(Lakoff and Johnson 1980:7)

In addition to metaphors which are parts of whole metaphorical systems, there are idiosyncratic metaphorical expressions that stand alone, not being part of a larger metaphorical system.  
As Lakoff and Johnson (1980:54) put it:

There are metaphors, like A MOUNTAIN IS A PERSON, that are marginal in our culture and our language; their used part may consist of only one conventionally fixed expression of the language, and they do not systematically interact with other metaphorical concepts because so little of them is used.  
(Lakoff and Johnson 1980:54).

They mention that instances of a metaphor such as foot of the mountain are idiosyncratic, unsystematic and isolated.  
Lakoff and Johnson are not particularly interested in such isolated cases, but in the context of the present discussion such isolated cases are equally relevant because the analogies made in such cases are fixed by convention, and an outsider may not be able to predict the analogies encoded in the CL.

Let us observe the mapping between two conceptual domains as manifested in the choice of adjectives co-occurring with nouns.  Consider the way in which English speakers relate the sensory categories of touch and taste.  In English, the same set of adjectives can be used for both touch and taste:

(6) smooth surface    smooth taste  
    rough surface     rough taste  
    sharp point       sharp taste

One could say, following Lakoff and Johnson (1980), that in English there is a metaphorical concept linking the two domains of touch and taste: TASTE IS TOUCH.  However, the asymmetrical use of antonyms in the following collocations
shows lack of any coherent mapping between the two conceptual domains:

\[
\begin{align*}
(7) & \text{ severe drought } (*\text{severe rain} & \text{ severe winter} \\
& \text{ mild drought } (*\text{mild rain} & \text{ mild winter} \\
& \text{ heavy drought } \text{ heavy rain } & (*\text{heavy winter} \\
& \text{ light drought } \text{ light rain } & (*\text{light winter} \\
& \text{ harsh drought } (*\text{harsh rain} & \text{ harsh winter} \\
& \text{ gentle drought } \text{ gentle rain } & (*\text{gentle winter} \\
& \text{ hard drought } \text{ hard rain } & (*\text{hard winter} \\
& \text{ soft drought } \text{ soft rain } & (*\text{soft winter}
\end{align*}
\]

One can say \textit{light wind}, \textit{strong wind}, and \textit{high wind}, but not \textit{heavy wind}, \textit{weak wind}, or \textit{low wind}, although \textit{light rain} and \textit{heavy rain} are acceptable.\textsuperscript{11} The collocations of (7) and (8) are not governed by coherent metaphorical concepts, but each collocation needs to be treated as an isolated case.\textsuperscript{12}

The collocations are governed by conventions of the language which compel the speaker to encode a particular meaning in a certain way despite the wide range of potential synonyms which would yield identical meanings.\textsuperscript{13}

\textsuperscript{11} \textit{Strong rain} seems to be acceptable to some people, but not \textit{weak rain}.

\textsuperscript{12} The collocations can alternatively be said to represent a collection of different metaphorical concepts.

Presumably, a metaphorical expression which is part of a metaphorical system today was at one point an isolated case: if a novel metaphorical expression represents a new way of perceiving a concept, and if the new perception becomes established in the language community, a range of expressions using the same metaphorical concept may develop. Then, what was originally an isolated case becomes part of a metaphorical system.

\textsuperscript{13} This is not to say that an expression such as \textit{heavy wind} may not occur. It may appear as a play on words or in a poem, but it will nevertheless be recognised as one deviating from the conventions of the language.
To an outsider who will not learn from the dictionary which collocations are allowed in the CL, such conventionalised collocations pose problems.

4.5.1.3 Conventionalised functions

Although Lakoff and Johnson reveal the conceptual metaphors which explain (and motivate) the extended meanings of conventional signs, they do not claim that the ways in which meanings will be extended are predictable. In this section, I will examine the unpredictability but at the same time motivatedness of the link between the literal meaning of a conventional sign and its conventionalised function.

In English, when a speaker utters the phrase Good morning on encountering another person, he is normally understood to be performing the act of greeting. The fact that this particular form has this function, however, is not predictable. Another form such as Nice morning could have just as well been chosen to perform the same function.

Although the form Good morning is chosen by convention to perform the function of a greeting in the morning, a link which connects the function that the conventional sign performs and the form of the sign can be perceived:

Initially, the expression was probably used to characterise the nature of the day which the speaker wished the hearer

Pawley and Syder (1983) point out that out of a range of well-formed sentences whose meanings are perfectly clear, only a few sound 'nativelike'.

Conventional collocations are what Makkai (1972:57) calls 'idioms of encoding'.
would have, and was used frequently as a friendly gesture. In present day English, the expression is conventionalised, and when used in a particular situation, it performs the function of a greeting.¹⁴

The forms of some conventional signs with conventionally fixed functions can, to some degree, be modified. As long as it is used in the right situation, (9) will also have the function of a greeting:

(9) A very good morning to you, gentlemen!

Other constructions which have set functions are the forms Do you mind V-ing (NP)?, or Could you V (NP)?, which are normally thought of as forms of request. In fact, it takes some ingenuity to think of situations where such utterances might be used without functioning as requests.

Because expressions such as Good morning, How are you?, Would you mind passing the salt?, Can you open the door? are understood primarily for the function they perform, the characterisation they provide has become obscured. When asked Can you pass the salt? in a dining situation, one does not normally reply only in terms of one’s ability to pass the salt and not provide the service required. If the hearer does react in this way, he has either misunderstood the speaker or is deliberately refusing to cooperate. Note that

¹⁴ Note that Good morning only functions as a greeting when used in particular situations, such as on encountering another person in the morning. If uttered in a sentence such as If it is a good morning, we will start on our journey, it would not have this function and would be taken as a description of the morning.
in the former case, what the hearer has misunderstood is the function, or in Austin’s (1962) terms, the ‘force’ of the speaker’s utterance, not the meaning of the individual words. This type of misunderstanding is different from not understanding the word meaning or not knowing how to relate the situation at sea described in the conventional sign he’s in deep water to the situation which the speaker is describing. If, on hearing the utterance he’s in deep water, the hearer asks What does water have to do with the situation? he has missed the link which associates the situation at sea with another kind of situation. If, on hearing the utterance Can you pass the salt?, the hearer replies Of course I can. Do you think my arm is paralysed?, he has misunderstood the function of the speaker’s utterance.

Conventional metaphors such as to keep one’s head above water, to kick the bucket, to count one’s chickens before they’re hatched can appear in utterances with a variety of functions, such as statements, questions, reports, predictions, requests, etc. The function of the utterances they can appear in is not fixed by convention. On the other hand, conventional signs such as Good morning or Why don’t you X? have fixed functions when used in particular situations. The former has the function of a greeting, and the latter has the function of a polite command.

Other expressions whose functions are conventionalised in English when used in particular contexts include such sentences as:
(10) That’s a likely story.

(11) Some people are never satisfied.

(12) Who do you think you are?
    (more generally: Who do NP think PRO COPULA?)

The sentences above are conventional insults whose force is not predictable from the syntactic and semantic rules of the language. According to these rules, (10) should be similar to That’s a probable story, but in fact it is closer to That’s an improbable story when uttered with a particular intonation in a particular context such as the following:

(13) The boy told them that there was no school. 'That’s a likely story', said his mother.

An equally unpredictable function associated with a conventional sign in Japanese is the following:

(14) o -chazuke de -mo doo desu
    HON-tea rice COP-also how about COP

    lit:'How about some tea rice [a kind of dish]?'

The above sentence, uttered to a visitor in Kyoto, Japan, has the function of requesting that the visitor leaves (cf. Itasaka 1978). The way in which this function is performed is that the host, by offering the visitor a meal, gives the visitor an opportunity to say that he/she will not stay.

The problem created by the conventional functions discussed above is that an outsider will firstly not be able to know which situations are perceived by the CL speakers to be the same kind of situation which calls for a conventional sign. Without this knowledge, the outsider will not know when to use a conventional sign with a conventional function. Secondly, she will not know what function might be called for in the
particular situation. For example, in Japanese society the expression *itadakimasu* (literally: 'I humbly receive') is used before starting a meal. This expression organises an activity, the activity of eating a meal. Although in many communities a linguistic sign which performs this function is established in the language, in some communities, English included, no conventional sign performing the same function exists.  

The third problem created by conventional signs with conventional functions is that the link between the literal meaning of the conventional sign and the function it performs may not be obvious to the outsider. For example, the English expression *Help yourself* uttered at a dinner party performs the function of inviting the hearer to do something which will benefit her. I have heard of a Japanese person who having heard this expression for the first time felt that he was being abandoned by his host and was being told to do things by himself.

4.5.2 Consequences of unpredictability (b)

The second level of unpredictability discussed in Section 4.4 was the unpredictability as to which linguistic sign will become conventionalised in a language community. If a category of experience perceived by a person gets encoded into

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15 Saying grace before a meal can be considered a conventional sign in English with this function. Though its form need not be fixed in a language community, it may be fixed within a family.
a linguistic form and if that linguistic form becomes established in the language, the outsider must be able to distinguish those linguistic signs which are ad hoc and those which are conventional, if she wants to use the CL as the CL speakers do. At the multi-word level, a conventional sign can look just like an ad hoc sign. However, unlike an ad hoc sign, the form of a conventional sign is fixed to varying degrees. In what form a linguistic sign is established in the language and to what degree one can alter the form are not predictable and create problems for the outsider.

4.5.2.1 Formal characteristics of conventional signs
The internal structure of a conventional sign is more or less frozen in that it resists the application of certain syntactic operations or substitution of some of the constituents by otherwise synonymous forms. The result of such operations is that the conventional sign loses its status as such. This is not predictable from the semantic or syntactic rules of the language. Compare the binominal phrase wallet and tape-recorder in

(15) John forgot to take his wallet and tape-recorder.
with an established binomial like ladies and gentlemen or bread and butter in the following sentences:

(16) Ladies and gentlemen, the show is about to begin.
(17) Providing furniture for new houses was the bread and butter of the industry. (OED)

Ross (1982) examines the phonetic features of elements in irreversible binomials and gives a list of constraints which determine the sounds in the first element and in the second element. The constraints, however, do not enable one to predict which element will come first and which second.
Whereas the order of the two nouns in the binomial phrase in (15) can be reversed and either noun can be replaced by another noun, yielding predictable changes in the characterisation, reversing the order of the two nouns in ladies and gentlemen or bread and butter will not only produce change in meaning, but will deprive them of their status as conventional signs. Similarly, if one were to modify the expression

(18) to let the cat out of the bag

and say

(19) to allow the cat out of the sack

the latter would not be recognised as a conventional sign.

The freedom to alter the internal structure of some conventional signs is extremely limited if they are to retain their status as conventional signs. In the following Japanese conventional sign, only the tense of the verb can be changed if the expression is to retain its status as a conventional sign:

(20) taka -ga shireteiru
    height-SUB known

lit: 'the height is known'
metaphorical: 'a trifling matter'

Similarly, the idiom to kick the bucket can appear in the

17 Some examples of irreversible binomials in Japanese are:
ten -to sen
    point-and line
neko-mo shakushi-mo lit: 'every cat and every ladle'
cat -also ladle -also metaphorical: 'everyone and anyone'
infinitive, past tense, or future perfect, but any alteration of the lexical items constituting the idiom changes it into an ad hoc sign.\textsuperscript{18}

In a conventional sign, one part may be fully fixed while another part is variable as long as it fits a certain syntactic pattern. Take the following forms which are used conventionally in English as directives: \textit{Can you X?} or \textit{Why don’t you X?}\textsuperscript{19} The variables can be replaced by strings, such as \textit{pass the salt} or \textit{close the window} in the former, and by \textit{leave the room} or \textit{have some more food} in the latter. However, changing any other part of the expressions will result in them no longer functioning as directives.

Some conventional signs allow more freedom in the modification of their internal structure than others. The proverb \textit{Don’t count your chickens before they’re hatched} can appear in many different forms: \textit{You’re counting your chickens before they’re hatched}, \textit{I’m not going to count my chickens before they are hatched}, etc. The second clause of the proverb can even be omitted: \textit{Don’t count your chickens}. There are certain compulsory elements of the proverb for it to be recognised as

\textsuperscript{18} If synonyms are substituted (\textit{to kick the pail}) or if the article, or the grammatical number are changed (\textit{He kicked a bucket/the buckets}), the phrase is changed to an ad hoc sign. Also, \textit{to kick the bucket} cannot be passivised and still retain its conventional sign status (cf. Chafe 1968). However, the conventional sign \textit{to keep tabs on} can be passivised and still retain its conventional sign status: \textit{John was kept tabs on by the CIA}.

\textsuperscript{19} As Gibbs (1986) argues, to say that such examples of indirect speech are conventional ways of performing requests does not mean that all such forms of requests are equally appropriate for all social contexts.
such because if one deviates too far from the norm and says
Don’t add up your apples before they’re ripe, or if one leaves
out the first clause and says (before) they are hatched, it
will be extremely difficult to recognise the proverb unless
given the right context.

4.6 Interference of the outsider’s constructed realities
In Section 4.5.2 we looked at the difficulties encountered by
an outsider who does not share the experiences of the CL
speakers. The fact that the outsider would have her own set
of experiences was ignored. In this section, we will examine
how the outsider’s own categorisation of experience encoded in
her own language may interfere with her understanding and use
of a language other than her own.

4.6.1 Differences in categories of experience
According to Grace’s reality-construction view, the categories
of experience encoded in one language can differ from those of
another language. Similarly, how a domain of experience may
be perceived as being similar to another can vary according to
the experience of the person, and the metaphorical concepts
also can vary from language to language. Following is a
clear case of such a difference in the mapping of two domains
of experience.

Consider the following conventional metaphor in Japanese:

(21) ashi-o _hipparu
    leg -DO pull
    'to pull (someone’s) leg'

It is a metaphor in which a concept, in this case an act, is
understood in terms of another act, namely that of pulling someone’s leg. The act which is understood by the characterisation which this Japanese conventional sign provides is the act of obstructing someone from going ahead with what he wants to do, as in the following example:

(22) Chichi-wa shigoto-o yame-te igaku-o
father-TOP job-DO quit-SEQ medicine-DO

benkyoo shi-ta -katta-ga kazoku-no minna-ni
study do -want-PAST -but family-GEN all -by

ashi-o hippar-are -ta
leg -DO pull -PASS-PAST

'Father wanted to quit his job and study medicine, but he was prevented by everyone in the family from doing so.'

An English speaker is likely to be surprised by this because, although English too has the expression 'pull (someone’s) leg', its metaphorical meaning is quite different from that of the Japanese expression ashi-o hipparu, namely 'deceive someone in a playful way' as in:

(23) Then I shall be able to pull the leg of that chap Mike. He is always trying to do me. (OED)

This example illustrates that similar characterisations are not necessarily conventionally associated with the same concept in two languages. The difficulty encountered by an outsider when she comes across a characterisation for which there is a conventional interpretation in her own language, is

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20 Similar concepts can be characterised differently in different languages:

English: Don’t count your chickens before they’re hatched

Japanese: Tora-nu tanuki-no kawa-zanyoo
take-NEG raccoon-GEN skin-counting

'Counting the skins of the raccoons which have not been caught'
that she is inclined to interpret it in the way conventionalised in her own language, because it is the interpretation she is most familiar with.\textsuperscript{21} Schank and Abelson (1977:67) point out that understanding is based on one's experience and that it is easier to understand something that one has experienced previously. Furthermore, they maintain that any deviation from a standard pattern of experience is handled with difficulty. Upon encountering the above Japanese conventional sign for the first time, it is natural for English speakers to decode it in the way they are familiar with, but once the association that the Japanese speakers make is explained to them, they should have no difficulty on subsequent occasions in interpreting it in the way that the Japanese speakers do.

The difference between two languages in the mapping of two domains can cause the outsider to map two domains which are conventionally mapped in her own language, even if the mapping of the two domains is not conventionalised in the CL. Consider the following Japanese sentence:

\begin{verbatim}
(24)  Kyoo -wa  kaze-ga  yowai
today-TOP wind-SUB weak

'Today, the wind is light.'

lit: *Today, the wind is weak
\end{verbatim}

Although \textit{weak wind} is an acceptable collocation in Japanese, it is not an acceptable collocation in English. Why this is so would be difficult to specify using the rules of grammar or semantics. After all, \textit{strong wind} is an acceptable

\textsuperscript{21} For mistranslations of this type, see Appendix 1.
Another way in which the conventions of the outsider's own language may interfere with her understanding of another language is when the CL conventionally characterises an act differently from the way it is conventionally characterised in the outsider's language. Consider the difference in point of view in (25):

(25) English: Sit behind the wheel.

Japanese: handoru-no mae -ni suwaru
handle -GEN in front-LOC sit

lit: sit in front of the wheel.

In the English conventional sign, the position is described from the point of view of someone standing by the headlights, looking into the car; whereas in the Japanese conventional sign, it is described from the point of view of someone, perhaps, sitting in the rear seat, looking at the steering wheel. In attempting to understand the Japanese expression, an English speaker may fail to change the point of view he is familiar with from the English expression and may interpret the position described by the Japanese expression from the point of view of someone standing by the headlights, in which case the position would be somewhere on the dashboard. Likewise, a speaker of Japanese may misinterpret the English expression.

4.7 Conclusion

22 The asymmetry of the use of light and heavy winds was noted in 4.4.4. The fact that neither *karui kaze ('light wind') nor *omoi kaze (*heavy wind') is acceptable in Japanese further demonstrates that the conventions are language specific.
It is well known that a truly competent translator is both bilingual and bicultural, but the question is, what does it mean to be both bilingual and bicultural? The problems encountered by an outsider presented above highlight the fact that knowing the syntax and the semantics of two languages is not a sufficient condition for translating between them. There is more to translation than merely substituting the lexical items and reorganising the structure of sentences. If there were an objective set of meanings rendered in every language, then the kind of problems which are encountered all the time in actual translation would not exist. The difficulty in translating by just looking up words in a dictionary shows that there is something lacking in the translation equivalents given in a dictionary. The view of meaning advocated here states that a meaning of a linguistic sign is closely related to the language user's experience in the community. Conventional signs are different from ad hoc signs in that they fit a standard pattern experienced by the language user. Motivated conventional signs provide a characterisation of a concept established in the language community. Because a motivated conventional sign provides a standard characterisation of a phenomenon that the language user experiences repeatedly, her own experience of the concept is likely to be entrenched in such standard characterisations.

What makes translation of conventional signs difficult is precisely the fact that such signs are deeply rooted in the experiences of the language users. As Grace (1987) says, conventional signs indicate the kinds of things that people in
the community talk about, and they also indicate established ways of talking about such things. These may be different from one language community to another, and this may create difficulties for the translator. Another cause of difficulty is that people in a language community not only form a habit of talking about what others in that community talk about, and of talking about such things in the way other people do, but they also tend to interpret particular characterisations according to the conventions of their own language. It is only with some difficulty that one can break away from the conventions of one’s own language and see that, for example, ‘to pull (someone’s) leg’ could be associated with an act other than ‘deceiving someone in a playful way’. Evidence for the difficulty of breaking away from the standard image encoded in the conventional signs of one’s own language will be examined in two case studies in the following chapter.
5. CASE STUDIES

5.1 Introduction

In this chapter, I discuss two case studies to exemplify how word meaning is related to our experience. The first case study illustrates how we associate particular experiences with words. This includes the kind of setting in which we have repeatedly encountered the word, the kind of object, state, act, etc. that we have heard the word being used to refer to, and other words we have repeatedly encountered the word with. The study shows that members of one language community share similar experiences associated with a word. The way in which we use our experiences associated with the word in order to select translation equivalents will be demonstrated in Section 5.2.6.

The second case study looks at how we interpret unfamiliar metaphors from another language. The results of this study demonstrate that metaphors which a person is familiar with from his/her own language greatly influence his/her interpretation of a novel metaphor. The study also demonstrates that when there does not exist in one’s own language a metaphor which is similar to the newly encountered metaphor, speakers try to make sense of the metaphor from the semantic properties of the individual words in the metaphor. Which semantic property the subjects might seize on to make sense of the metaphor is unpredictable. Secondly, speakers attempt to make sense of an unfamiliar metaphor by relating
the description given in the metaphor to their own experience. What kind of experience the speakers relate the description of the metaphor to is also unpredictable.

5.2 Case study I: Category of experience associated with a word

In the previous chapter, I argued that the creation of a linguistic sign can be explained by the creator's experience in the community which leads her to perceive the conceptual category encoded in the word. When the conceptual category is encoded in linguistic form, the conceptual category which is associated with the word can be passed on from one person to another and so become established in the community. My claim in this section is that the category of experience which the creator encoded into a word is not passed on from one person to another rigidly fixed and unaffected by the experiences of each person in the community. Rather, the category is understood and used by each member of the community against the experience that they have of the word.

The argument makes use of Fillmore's Frame Semantics (1975, 1977, 1978, 1982) which has close links with Schank and Abelson's (1977) notion of 'scripts', Minsky's (1975) notion of 'frames', and which makes use of Rosch's (1973) notion of 'prototypes'.

5.2.1 Frame Semantics

Fillmore (1977, 1982) says that people associate with a word a certain 'frame' which provides characteristics of a
schematised scene or situation which is necessary for understanding the meaning of the word. For example, in order to understand the meanings of the verbs **accuse** and **criticise**, one needs to imagine a kind of situation:

There is a person who formed or expressed some sort of judgement on the worth or behavior of some situation or individual ('the Judge'); a person concerning whose behavior character it was relevant for the Judge to make a judgement ('the Defendant'); and some situation concerning which it seemed relevant for the Judge to be making a Judgement ('the situation').

(Fillmore 1982:115-116)

This frame characterises the verbs **accuse** and **criticise**:

I chose to describe **ACCUSE** as a verb usable for asserting that the Judge, presupposing the badness of the Situation, claimed that the Defendant was responsible for the Situation; I described **CRITICIZE** as usable for asserting that the Judge, presupposing the Defendant's responsibility for the Situation, presented arguments for believing that the Situation was in some way blameworthy.

(Fillmore 1982:116)

Fillmore concludes that these verbs share a particular frame which provides a background against which they are understood. This particular frame involves some sort of schematisation of human judgement and behaviour. Without the knowledge of such a structure, the words cannot be understood. The frame is said to define the word meaning, and the word, in turn, is said to 'evoke' the entire frame against which it is understood.

Similarly, the meaning of the word **orphan** is understood against a frame which accounts for the clearest cases of an orphan. The background frame is as follows:

... children depend on their parents for care and guidance without question; a person without parents has a special status for society only up to a particular age, because during this period a society needs to provide
It is against this background that a twenty-year-old who is generally regarded as being able to take care of herself would not be described as an orphan. It is also against this background that an orphan is seen as somebody deserving of pity. The frame accounts for the clearest cases of the meaning of the word, and whether one can use the word orphan for cases other than the prototypical ones depends on the degree of departure from the prototype frame. Thus, a child who has killed her parents may, for some people, depart too much from the prototype to be called an 'orphan', but a twenty-year-old who has lost her parents but who is intellectually or physically handicapped and needs care and guidance may qualify as an orphan to some people. Thus, the frame provides the 'core', i.e. the clearest, or best type of case which underlies the meaning of orphan, but even in cases departing from the core meaning the word orphan may still be used. There is a typical usage of the word orphan, accounted for by the frame, and less typical usages decreasing in similarity to the core meaning. This notion of an internally structured semantic category consisting of instantiations of the category which differ in the degree to which they are like the core meaning and which do not have well defined boundaries comes from the work of Rosch (1973). Rosch's view of semantic categories can be contrasted with Katz's (1972) notion of semantic categories which are treated as though they were internally unstructured, and as though
category boundaries were always well defined.¹

In the first case study, I adopt Fillmore's notion of 'frame' first to explain the striking similarity between people's responses when asked to provide an example sentence using a particular word, and then to examine further the concepts or images associated with a word in order to demonstrate the difference between two words in different languages.

5.2.2 The background of the study

What prompted me to investigate the concepts associated with a word was an incident which took place in a Japanese-to-English translation class. We were translating a Japanese cooking recipe into English. It was a recipe for a Japanese-style Scotch Egg. According to the recipe, an egg is covered with a layer of mince meat, and the next instruction is for the mince to be covered with starch. The original Japanese sentence is as follows:

(1) Yude-tamago-no shuui -ni katakuriko-o
boiled-egg GEN surrounding-IO starch -DO

tappuri-to mabushi...
plenty -MANNER sprinkle

¹ Katz (1972:40) states that the meaning of chair can be decomposed into a set of concepts which might be represented by the semantic markers OBJECT, PHYSICAL, NON-LIVING, ARTIFACT, FURNITURE, PORTABLE, SOMETHING WITH LEGS, SOMETHING WITH A BACK, SOMETHING WITH A SEAT, SEAT FOR ONE. Although some of these concepts can be further decomposed, each semantic marker is treated equally to the others in that they each provide a basis for differentiating between the meaning 'chair' and other meanings. According to Katz (1972:43), the semantic category of 'chair' also consists of 'selection restrictions' which state the conditions under which the meaning represented by the set of semantic markers can combine with other meanings to form a sentence.
A student whose native language is Japanese translated (1) into English as (2):

(2) Dust the mince with starch.

The three English speakers in the class immediately rejected the translation, claiming that it was not good English. They said that the verb dust was not used in this way. The students claimed that to dust basically meant 'to remove dust', and when used to mean 'to apply dust' it was most commonly used in the context of spraying crops and was not normally used in a cooking context. I later found that not all English speakers support the judgement of the students in this class. The Macquarie Dictionary lists the usage Dust the cake with sugar, and there are English speakers for whom (2) is a perfectly natural sentence. The point I wish to make here is not whether sentence (2) is acceptable English or not. What I want to examine is the frame which is evoked by the Japanese verb mabusu and how it might have affected the choice of its English translation equivalent. The disagreement among the English speakers regarding the use of the verb dust indicates that the properties of a frame can vary to some extent from speaker to speaker and that there might not be a clearly defined frame shared by all speakers.

The word in Japanese that the student was translating was mabusu, a verb which has a general meaning of 'to sprinkle something on the surface of something'. However, mabusu appears only in highly specialised contexts. For most speakers of Japanese, the direct object of mabusu refers
typically to a powdery substance, and the indirect object typically refers to some sort of food that is covered with the powdery substance. Thus, it is normally used in a cooking context, such as (3):

(3) Taro-o wa ebi -ni komugiko-o mabushi -ta.
\[ \text{Taro -TOP shrimp-IO flour -DO sprinkle-PAST} \]
'Taro covered the shrimp with flour.'

In (3), mabusu represents the action of covering all of the surface area of the shrimp with flour. To some people, mabusu represents an action where a powdery substance is sprinkled only on the top surface of a kind of food, as in (4):

(4) Gohan-ni furikake -o mabushi
\[ \text{rice -IO dried fish flake mixture-DO sprinkle} \]
'to sprinkle dried fish flake mixture on rice'

Although it is not clear to a person who is not familiar with the eating habits of the Japanese that in the above sentence mabusu means 'to sprinkle on the top surface of the rice', furikake, which is a powdery mixture normally consisting of dried fish flakes, pieces of dried seaweed, and sesame seeds, is sprinkled on the top surface of rice and not usually used to coat the rice with. To some speakers of Japanese, mabusu has both usages represented in (3) and in (4).

In the following section, I will describe a survey which I conducted to find out the kind of images which Japanese people associate with the verb mabusu.

5.2.3 Survey-1: Example sentences using mabusu

In this survey, I simply asked 44 native speakers of Japanese
to write one sentence using the verb mabusu. Out of the 44 speakers, three said they had never used the word before and did not know how to use it. One seemed to have confused the word for another verb mazeru, which means 'to mix', and used the wrong case endings. Out of the remaining 40, 10 gave sentences with only a direct object of the verb mabusu and did not specify the indirect object. The other 30 speakers specified both the direct and the indirect object. Thus, the sentences were of the following form:

(5) (N-ni) N-o mabusu
(N-IO) N-DO V

None of the respondents specified the subject or the topic of the sentence. The ellipsis of the topic and the subject is normal practice in Japanese. The nouns which were used by the respondents as the direct object and the nouns which were used as the indirect object are listed below with my translations given underneath. The numbers next to the nouns indicate the number of people who used the noun in their sentences.

(6) DIRECT OBJECT (total number of people who used a DO: 40)

10-kinako
soy bean flour

5-goma
sesame seeds

4-katsuobushi
dried fish flakes

3-satoo
sugar

3-kona
powder

2-komugiko
flour

2-furikake
dried fish flake mixture

2-panko
bread crumbs

The questionnaire form used in the survey is given in Appendix 2.
The similarity in the types of noun used as the direct object, and the similarity in the types of noun used as the indirect object is striking. First of all, note that all the nouns in both (6) and (7) represent a kind of food. Secondly, with only one or two exceptions, all the nouns in (6) represent a powdery or flaky substance. The one clear exception is su 'vinegar', which is a liquid, and the other possible exception is tarako 'fish roe'. The reason why fish roe is only a possible exception is that fish roe may be dried, in which case it is powdery and is often sprinkled on top of rice.
In the survey, the variation among the speakers as to whether mabusu means 'to cover the entire surface area of the food' represented by the indirect object or whether it means 'to cover only the top surface' did not emerge very clearly. In some cases, knowing the way the dish is normally prepared made it clear which was meant:

(8) sakana-ni merikenko-o mabusu
    fish -IO flour -DO V

Since one normally covers the entire surface of fish with flour before frying, it can be assumed that the author of this sentence used mabusu to mean 'cover the entire surface'. Other uses of mabusu which could be interpreted for the same reason to mean 'cover the entire surface' were cases where words for breadcrumbs, starch, or powder were used with an indirect object which represented an uncooked, easy to roll item of food. The following sentence which was given by a surprisingly large number of respondents also uses the verb mabusu to mean 'cover the entire surface'. This is clear only to someone who knows that kinako 'soy bean flour' has limited use in Japanese cooking and that the most generally known dish using soy bean flour is kinako-mochi 'soy bean flour rice cake' which is made by rolling the rice cake in a mixture of sugar and soy bean flour.

(9) omochi -ni kinako -o mabusu
    rice cake-IO soy bean flour-DO V

There were 13 cases like (8) and (9), where mabusu was clearly used to mean 'to coat, cover'. In five cases, mabusu was clearly used to mean 'sprinkle on top of'. Two of the five cases were exactly the same as (4) mentioned in 5.2.1 above,
and in the remaining three cases, the nature of the item of food represented by the indirect object was such that its surface could not easily be covered by a powdery substance. The most obvious example is the following:

(10) katsuobushi — o raamen — ni mabusu-ta
    dried fish flakes-DO noodle soup-IO V —PAST

In 21 cases, it was not clear which meaning of mabusu the respondent had in mind; this includes the 10 respondents who did not specify the indirect object.

What emerges from the survey is an image, or a frame that Japanese speakers associate with the word mabusu. The setting, or scene associated with the word is a cooking scene. The action represented by the verb is either that of covering the entire surface or the top surface of an item of food with a powdery or flaky edible substance. What is striking is that the images people associate with mabusu are relatively uniform rather than varied. Does this mean that mabusu can only be used in a cooking context with a direct object representing a powdery or flaky substance and an indirect object representing an item of food? The next survey shows that this is not the case.

5.2.4 Survey-2: Rating sentences with mabusu

Using a questionnaire, 27 native speakers of Japanese were asked to rate nine sentences using the verb mabusu. They were asked to write number '1' next to the sentence which they

3 The questionnaire form used is given in Appendix 3.
thought was the most typical usage of mabusu, '2' for the next most typical usage, and so forth. For those sentences which they accepted but would not use themselves, they were asked to draw a triangle next to the sentence, and for those sentences which were unacceptable, they were asked to draw a cross.

For the purpose of the discussion that follows, I have coded the sentences with letters (A, B, C, etc.) and have given a morpheme-by-morpheme gloss as well as a free translation. The verb mabusu, however, has been left untranslated. The sentences that the Japanese speakers were asked to rate were as follows:

(A) ebi -ni udonko-o mabusu
    shrimp-IO flour -DO V
    '(I) MABUSU flour on the shrimp'

(B) sakana-ni shio-o mabusu
    fish -IO salt-DO V
    '(I) MABUSU salt on fish'

(C) natsu -wa shibafu-ni mizu -o mabusu
    summer-TOP lawn -IO water-DO V
    'In summer, (I) MABUSU water on the lawn'

(D) niwa -no ki -ni hiryoo -o mabusu
    garden-GEN tree-IO fertiliser-DO V
    '(I) MABUSU fertiliser on the tree in the garden'

The meaning of the word typical can be vague and created problems for the survey. Some of the Japanese speakers rated some sentences high because they considered the situation described by the sentence to be more typical or more common than others.

These sentences are complete sentences even though the subjects have been omitted.
(E) 

**otoofu-ni shoyu -o mabusu**
tofu -IO soy sauce-DO V

'(I) MABUSU soy sauce on tofu'

(F) 

**yasai -ni choomiryoo-o mabusu**
vegetable-IO seasoning -DO V

'(I) MABUSU seasoning on vegetables'

(G) 

**gohan-ni okaka -o mabusu**
rice -IO shaved fish-DO V

'(I) MABUSU shaved fish on rice'

(H) 

**omochi -ni anko -o mabusu**
rice cake-IO sweet azuki paste-DO V

'(I) MABUSU sweet azuki paste on rice cake'

(I) 

**byoobu-ni kinpun -o mabusu**
screen-IO gold powder-DO V

'(I) MABUSU gold powder on the screen'

The results of the questionnaire are given in Table 1 below. The numbers to the right of the letters identifying the sentences correspond to the number of subjects who rated the sentence as most typical (1), second most typical (2), third most typical (3), etc., or as 'acceptable, but would not say it myself' (Δ), or unacceptable (x). The rightmost column indicates the total number of people who assessed the sentences. Note that some of the subjects left some of the sentences unassessed.
The examples which indicate a clear agreement by the majority of the respondents were sentences (A), (C), (D), and (E). (A) had the highest number of people who rated it as being the most typical (19 out of 26), followed by (G) (10 out of 26), and (B) (9 out of 26). On the other hand, all subjects except one rated sentence (C) as unacceptable, and sentences (D) and (E) were also rated unacceptable by the majority of the respondents. There was much more variation in the case of the other sentences.

Note that sentences (A), (B), and (G) fit the frame of mabusu described in Section 5.2.3, the difference between (A) and (G) being that in (A) mabusu means 'to coat the entire surface', while in (G) it means 'to sprinkle on top'. In (B) the meaning of mabusu is vague: both 'to coat the entire surface'
and 'to sprinkle on top' are possible interpretations. On the other hand, sentences (C), (D), and (E) do not fit the frame. In (C), none of the properties of the frame are met. In (D), hiryoo 'fertiliser' can be a powdery substance, but it is not an edible substance and 'tree' is not an item of food. In (E), otoofu 'tofu' is an item of food, but shooyu 'soy sauce' is not a powdery substance.

If the meaning of mabusu were exhaustively determined by selection restrictions which state the conditions under which a word, represented by semantic markers, can combine with other words, one would expect the rating of the Japanese speakers to be uniform rather than varied. If all the uses of mabusu were to be explained in terms of selection restrictions, one would expect to find features shared by all the direct-object items and features shared by all the indirect-object items. Rather, there is a prototype frame associated with mabusu which specifies the most common type of situation in which the word occurs, and other concepts associated with the frame. A language user acquires the frame associated with the word by repeatedly encountering the word in similar settings and by associating the word with the other concepts co-occurring in the same setting. Because members of one community are likely to encounter the word in similar settings, they are likely to share the frame associated with the word although some of the properties of the setting may differ slightly from speaker to speaker. The way in which people judge whether mabusu is used appropriately
or not in a given sentence is by comparing the situation encoded in the sentence against the frame they have for the word. If the speaker judges that the usage is close enough to her frame for mabusu, she will accept it; if it deviates too much from the frame, she will not accept it.

5.2.5 Survey-3: Example sentences using sameru

Another survey---using the same 44 native speakers of Japanese that participated in the mabusu survey (see Section 5.2.3)---was conducted using another verb, sameru. This intransitive verb has the general meaning 'to become cold'. This verb also has a very restricted frame in that it is used for things which are or should be under normal circumstances hot or warm, and is typically used with liquids, especially drinkable liquids. We can examine the kind of words used by the respondents as the subject of the verb sameru in the list below. Again, the numbers to the left of the words indicate the number of respondents who used the word as the subject. The three columns to the right of the words show, respectively, whether the item represented by the word is normally hot or warm, whether it is a liquid; and whether it is drinkable or edible.

---

6 The questionnaire form used is given in Appendix 4.
<table>
<thead>
<tr>
<th>Item</th>
<th>HOT</th>
<th>LIQUID</th>
<th>CONSUMABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-ocha</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>tea</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-netsu</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>fever; enthusiasm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-koi</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>love</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-yu</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>hot water</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-suupu</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>soup</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-naka</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>friendship</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-kohii</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>coffee</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-ryoori</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>prepared food</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-gohan</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>rice</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-furo-no yu</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>bath-GEN hot water</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-raamen</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>noodle soup</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-karada</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>body</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-karee</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>curry rice</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-biiru</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>beer</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Out of the 44 speakers, one mistook the verb for another verb which is homonymous with *sameru*. Her sentence was not included in the survey. 13 speakers used the verb metaphorically, as in (12):
Words used as subjects in this metaphorical use are koi 'love', netsu 'fever; enthusiasm'. Among the 30 sentences in which sameru was not used metaphorically, all but one had as the subject a noun which represented something that is normally hot or warm. 23 out of the 30 subjects used nouns representing a liquid substance, and 27 used nouns representing a consumable substance. 21 out of the 30 subjects used nouns which represent things that are normally hot, liquid, and drinkable. A frame for sameru held by the speakers of Japanese which emerges from this survey is the following: the scene associated with sameru is that of a liquid cooling down, where the liquid is something that is desirably hot or warm and something that is no longer tasty when it is cold (e.g. ocha 'tea', gohan 'rice', suupu 'soup', raamen 'noodle soup'), unhealthy when it is cold (karada 'body'), or uncomfortable when it is cold (furo-no oyu 'bath water').

As was the case with mabusu, speakers of Japanese judge the acceptability or unacceptability of sameru against this prototype frame. This will be seen in the following survey.

5.2.6 Survey-4: Rating sentences with sameru
28 native speakers of Japanese were asked to rate the typicalness of the use of sameru, in a manner similar to that
in which speakers were asked to rate the typicalness of the use of mabusu. The subjects used in the two surveys were, with a few exceptions, the same.

Sentences J-Q which the Japanese speakers were asked to rate are presented below with their morpheme-by-morpheme and free translations. The verb sameru has been left untranslated.

(J) ocha-ga sameru
    tea -SUB V
    'the tea SAMERU'

(K) gohan-ga sameru
    rice -SUB V
    'the rice SAMERU'

(L) tenpura -ga sameru
    fried food-SUB V
    'the fried food SAMERU'

(M) ofuro-no oyu -qa sameru
    bath -GEN hot water-SUB V
    'the bath water SAMERU'

(N) oobun-ga sameru
    oven -SUB V
    'the oven SAMERU'

(O) yutanpo -ga sameru
    hot water bottle-SUB V
    'the hot water bottle SAMERU'

(P) kusuri -o nonda-ra netsu-ga sameta
    medicine-DO drink-COND fever-SUB V
    'when I took the medicine, my fever SAMERU'

7 The questionnaire form used is given in Appendix 5.
(Q) biiru-ga sameru
    beer -SUB V

    'the beer SAMERU'

The results of the survey are given in Table 2. The scoring method used in the sameru survey was the same as that used in the mabusu survey: 1 most typical, 2 second most typical, etc., A acceptable but not used by the speaker, x unacceptable. The far right column gives the number of speakers who gave the sentence a rating. One person did not rate sentence (M).

Table 2: Results for SAMERU

<table>
<thead>
<tr>
<th>sentence</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>A</th>
<th>x</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(J)</td>
<td>25</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>(K)</td>
<td>12</td>
<td>6</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>(L)</td>
<td>7</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td></td>
<td></td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>(M)</td>
<td>12</td>
<td>8</td>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>(N)</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>(O)</td>
<td>9</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td></td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>(P)</td>
<td>4</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>(Q)</td>
<td>2</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>28</td>
</tr>
</tbody>
</table>

Cases where significant agreement among the respondents can be found are sentences (J) and (Q). All 28 respondents rated (J) to be either the most typical usage of sameru (25 out of 28) or the second most typical usage (three out of 28), while all 28 respondents rated (Q) to be either unacceptable (26 out
of 28) or acceptable but not used by the speaker (two out of 28). For the other sentences, the responses varied.

As was the case with mabusu, the two surveys on sameru indicate that speakers of Japanese agree to a significant degree what the typical use of sameru is. The typical use reflects the properties of the frame associated with the word. The acceptability or unacceptability of sentences (J) to (Q) are judged against this frame, and speakers vary according to the extent to which they are willing to extend the frame to include the situations encoded in the sentences. Such degrees of acceptability or unacceptability would be difficult to explain in terms of selection restrictions. An added problem for the selection restriction approach with sameru is how to represent the fact that sameru is used for things which are desirably hot or warm. The only way in which we know what is better hot is by experience, and since the desirable temperature of a bowl of soup differs from the desirable temperature of a bath, it would be extremely difficult fully to specify the conditions under which the word sameru can be used.

5.2.7 Comparing frames for translation

Having exemplified the prototype frame associated with mabusu shared by the native speakers of Japanese, we can now return to the problem of translating mabusu into English encountered by the Japanese student in the translation class. Appearing in the recipe, mabusu evokes in the mind of the Japanese
speaker the frame associated with this verb. If she had known of an English word which had a frame associated with it that represented the same category of experience as mabusu does, the translation would have been more or less mechanical.

However, when a matching frame cannot be found in the TL, the translator has to take into account the frame of the SL, and compare it against the available frames represented by the various words in the TL. She then has to make a choice by selecting a word in the TL which has a frame that is closest to the frame of the SL word in those respects which she considers relevant. The Japanese student’s choice of the English verb dust was probably based on the notion that like mabusu, dust has a definite association with powdery substances. Although in the recipe the context reveals that mabusu is used to mean ‘cover the entire surface’, the student may be one of the many Japanese speakers who associate the word with ‘covering the top surface’, in which case she may find a correspondence between katakuriko-o mabusu ‘to MABUSU starch (on something)’, and dust the cake with sugar. The possible use of dust with an item of food would have given the Japanese student an additional reason for choosing the verb dust as the English translation equivalent of mabusu.

However, the judgement of the English speakers of the class was that the frames of the two words did not match sufficiently. The three native speakers of English in the class, perhaps as a consequence of their limited experience with the verb dust, appear to have a very restricted frame
associated with this word. Dust as a verb, according to the students, is firstly associated with a cleaning scene such as removing dust from furniture. However, its secondary association is that of a farming scene where crops are sprayed with insecticide. When given the sentence dust the cake with sugar, the students said that the usage was possible, but they were not willing to expand the frame to include dust the shrimp with flour before frying. In the case of the last sentence, the students said that the verb dust had to be replaced with either cover or coat. The reason for this may not simply be that the students associate the verb dust with the act of applying a powdery substance on the top surface of something rather than on the entire surface. Since the students did not normally associate the verb dust with a cooking scene, they were already stretching their frames for the verb to incorporate sentences like dust the cake with sugar. An additional departure from the prototype frame, such as using dust to mean 'cover the entire surface' was not acceptable.

To those English speakers who do associate the verb dust with a cooking scene and who judge dust the mince with starch as a perfectly normal expression, the frame associated with dust may be expandable to incorporate the use of dust to mean both 'cover the top surface' and 'cover the entire surface'.

8 It is also possible that in some dialects of English, dust is not associated with a cooking scene.
A close examination of the properties of the prototype frame associated with Japanese mabusu reveals the kind of properties the translator looks for when trying to find its translation equivalent. Since the prototype frame one associates with a word is acquired through accumulated experience, the sharing of experience by the members of the community leads to a prototype frame shared by the majority of its members. Thus, the kind of properties a speaker of Japanese would look for in English when translating mabusu can be revealed by the prototype frame she has for mabusu.

However, in translation one must also consider the prototype frames associated with the TL words. Whether the translation is considered by the TL speakers to be acceptable or not will depend on how the use of the word in the sentence measures against the prototype frame the TL speakers associate with that word.

The point I wish to emphasise is that the Japanese student’s selection of the translation equivalent of mabusu and the decision by the English speakers in the translation class to use the verb cover rather than dust as the equivalent of mabusu were not based on decomposing the meanings of the verbs mabusu, dust, and cover. Rather, they were based on a comparison of the experiences associated with mabusu and the experiences associated with the two English verbs. Although the notion of ‘experience’ is vague, by relating word meaning to our experience much insight can be gained into how we
select translation equivalents.

5.3 Case study II: The interpretation of novel metaphors

5.3.1 Objective
The object of this second case study is to exemplify two points: (1) the extent to which the metaphors in one's native language affect one's interpretation of an unfamiliar metaphor from another language; (2) the way in which a person tries to make sense of an unfamiliar metaphor by seizing on particular semantic properties of the words in the metaphor or by relating what is expressed in the metaphor to his/her own experience when no metaphor exists in his/her own language which is similar to the unfamiliar metaphor.

5.3.2 Method
40 Stage Three students studying Japanese at the University of Auckland were asked to answer a questionnaire. The students' language skills are not at the level where they would be familiar with many Japanese metaphorical expressions. Of the 40 students, 24 were native speakers of English, 15 were native speakers of Chinese/Cantonese, and one was a native speaker of Hindi. The students were given 10 isolated romanised Japanese sentences or phrases which included metaphorical expressions distinguished from the rest of the sentence or phrase by being in italics. Each sentence or phrase was accompanied by morpheme/word glosses and a literal translation. The students were asked first to write in the parentheses provided the idiomatic meanings which they thought
the Japanese expressions had. Then they were asked to explain why they thought the literal meaning of the Japanese expression supported the idiomatic meaning. If the student happened to know or had heard the Japanese expression before, he/she was asked to state this in the reply. The Japanese metaphorical expressions in the questionnaire had been selected so as to provide a mixture of metaphors which have close parallels in English and those which have no close resemblance to any English metaphors. The questionnaire used in the case study appears in Appendix 6. The results of the questionnaire are discussed in the next section.

5.3.3 Results
The results of the study are presented in the following manner. First, the Japanese metaphorical expression is given along with its morpheme-by-morpheme gloss and its literal translation. This is followed by its metaphorical meaning in Japanese; this last piece of information, of course, was not available to the students who answered the questionnaire. The metaphorical meanings of the expressions used here were taken from the Shin-meikai Japanese Dictionary and then translated by me into English. The results of the survey are presented in the form of a table, listing what the students thought were the metaphorical meanings of the Japanese expressions.⁹

⁹ Some subjects did not write anything for some of the metaphors.
The reader may sometimes find that what are listed as separate entries in the chart are quite similar and could be conflated. There were many problems involved in sorting out the subjects' responses, including poor English skills of the speakers of Chinese. Many of the answers were brief, and it was often difficult to discern what was meant.

These problems, however, should not distract our attention from the quite clear evidence for my claim that metaphors in one's native language affect to a large extent one's interpretation of unfamiliar metaphors in another language; and in the case of interpreting unfamiliar metaphors which have no resemblance to metaphors in one's own language, what semantic properties of the individual words of the unfamiliar metaphor the hearer may seize on or to what experience the hearer may relate the description given by the metaphor is unpredictable.

Listed below are the Japanese metaphorical expressions (A)-(J) and the students' interpretations of the expressions.

(A) kare-wa kao -qa hiroi
he -TOP face-SUB wide

'He has a wide face'

IDIOMATIC MEANING: 'He socialises with a wide range of people and, as a consequence, knows and is known by many people in different fields'
<table>
<thead>
<tr>
<th>Eng</th>
<th>Chi</th>
<th>Hin</th>
</tr>
</thead>
<tbody>
<tr>
<td>knows many people; well known; appears in many places</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>honest; open; friendly</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>conceited</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>cheerful; generous</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>experienced</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>talented</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>two-faced</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>strange</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>sees various things</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>serious</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>respected</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

(B) **hito -o kuu**

person-DO eat

'to eat someone'

IDIOMATIC MEANING: 'to think nothing of someone'

<table>
<thead>
<tr>
<th>Eng</th>
<th>Chi</th>
<th>Hin</th>
</tr>
</thead>
<tbody>
<tr>
<td>to dominate someone; to belittle someone; to beat someone easily</td>
<td>17</td>
<td>1</td>
</tr>
<tr>
<td>to scold; to be angry with s.o.</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>to love/like someone</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>to bother someone</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

(C) **mizu -o sasu**

water-DO pour

'to pour water (on something)'

IDIOMATIC MEANING: 'to purposely tear apart people who are friendly with each other or to make negative comments about something that someone has already started'
<table>
<thead>
<tr>
<th>English</th>
<th>Chinese</th>
<th>Japanese</th>
</tr>
</thead>
<tbody>
<tr>
<td>wet blanket; to dampen enthusiasm</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>to reduce tension</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>to reject</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>to forget about something</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>to make a situation worse</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>to make something understandable; to magnify</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>to finish something</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>to clean</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>to overspend on one thing</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>to make something grow</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>to cause anguish</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>to keep calm</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>to assist</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>careless</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

(D) *hito -no ashi-o hipparu*  
*person-GEN leg -DO pull*  
'to pull someone’s leg'

IDIOMATIC MEANING: ‘to prevent someone’s smooth progress in doing something; to prevent someone from going ahead with what he/she wants to do’

<table>
<thead>
<tr>
<th>English</th>
<th>Chinese</th>
<th>Japanese</th>
</tr>
</thead>
<tbody>
<tr>
<td>to trick s.o.; to make fun of s.o.; joke at s.o.’s expense</td>
<td>22</td>
<td>9</td>
</tr>
<tr>
<td>to prevent s.o. from doing s.t.</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>to make an effort to reach the top before others</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>to catch s.o. unaware</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>to drag s.o. to your position</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
(E) ne-mo ha-mo nai hanashi
root-also leaves-also NEG story
'a story which has no roots or leaves'

IDIOMATIC MEANING: 'a story which is not based on any evidence'

<table>
<thead>
<tr>
<th>English</th>
<th>Chinese</th>
<th>Hindi</th>
</tr>
</thead>
<tbody>
<tr>
<td>no substance; no basis</td>
<td>23</td>
<td>14</td>
</tr>
<tr>
<td>unadorned heart of story</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

(F) ha-ga uku
teeth-SUB float
'the teeth float'

IDIOMATIC MEANING: 'to be made to feel unpleasant due to someone’s showy or superficial remarks or actions'

<table>
<thead>
<tr>
<th>English</th>
<th>Chinese</th>
<th>Hindi</th>
</tr>
</thead>
<tbody>
<tr>
<td>to chatter a lot</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>to tell a lie</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>to be very scared</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>old person; cannot hide age</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>bark worse than bite</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>no honour</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>unbelievable story</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>false teeth</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>false; not real</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>losing livelihood</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>to be of no use</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>appears to be strong, but is weak</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>to just keep up</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

(G) wakai hito -wa atama-ga yawarakai
young people-TOP head -SUB soft
'young people have soft heads'
IDIOMATIC MEANING: 'to be free from preconceptions and to be able to form new ideas'

<table>
<thead>
<tr>
<th>English</th>
<th>Chinese</th>
<th>Japanese</th>
</tr>
</thead>
<tbody>
<tr>
<td>easily influenced</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>inexperienced</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>happy go lucky; think they know but don’t; soft in the head</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>weak willed</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>ignorant</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>innocent</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

(H) mizu-ni nagasu
water-LOC flow
'to let something flow in water'

IDIOMATIC MEANING: 'to forget about the troubles in the past and to make peace'

<table>
<thead>
<tr>
<th>English</th>
<th>Chinese</th>
<th>Japanese</th>
</tr>
</thead>
<tbody>
<tr>
<td>to go with the flow; let s.t. take its natural course</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>to forget about s.t.</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>to put aside temporarily</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>to make s.t. easy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>to let things get mixed up</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>to do what one likes to do</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>to allow others to observe and learn</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>to wash dirt off of s.t.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>to be unsuccessful</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>to miss the opportunity</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>to not offer help</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>to let s.o. carry on in wrong direction</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
(I) **shiroi me -de miru**  
white eye-INST look  
'to look with white eyes'

IDIOMATIC MEANING: 'to look with eyes which express coldness and hatred'

<table>
<thead>
<tr>
<th>English</th>
<th>Chinese</th>
<th>Hin</th>
</tr>
</thead>
<tbody>
<tr>
<td>to look down on someone</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>biased opinion</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>look innocently; not see the bad</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>to be afraid</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>unbiased opinion</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>to be angry</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>shocked; surprised</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>to not look at reality</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>unable to concentrate</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>rosy perspective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>to pity</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>to not look closely</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>to not care about s.o.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>unable to differentiate</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

(J) **me -o tsuburu**  
eye-DO close  
'to close one's eyes'

IDIOMATIC MEANING: 'to see someone doing wrong, but to pretend not to have seen it'
to pretend not to see; to ignore 21  5  1
cannot be bothered with things 2

to be uninterested in others' affairs 2

to bring back memories 1

to blink; wink; sleep 1

to shut everything out 1

to let people take advantage of you 1

to not take things seriously 1

to not want others to see your secret 1

5.3.4 Discussion

Although it was not always easy to identify the particular metaphorical expression in the students' native language which may have influenced their interpretation of the Japanese expression, there were some clear cases which are evidence that metaphorical expressions in one's own language can affect the interpretation of newly encountered metaphors from another language.

The clearest case for this in the results obtained from the English speakers is (D):

(D)  hito-no ashi-o hipparu
      person-GEN leg -DO pull

      'to pull someone's leg'

22 out of the 24 speakers of English assumed that the Japanese expression had the same meaning as the English expression to
pull someone's leg, namely 'to deceive someone in a playful way'. If it is specifically the English metaphor which affects the English speakers' interpretation, the prediction is that the non-English speakers are more likely to interpret the Japanese metaphor differently. This prediction was partly borne out, although this is not so obvious from the results given in Section 5.3.3. Of the 13 Chinese students who responded, four gave an interpretation other than that given by most English speakers. In Chinese, there is a metaphorical expression which can be translated literally as 'to pull someone's hind leg', and it has a similar metaphorical meaning as the Japanese expression. The Chinese expression means 'to obstruct someone in an indirect way, (i.e. not openly)' (M. Ip, personal communication), or 'to make it impossible for someone to carry on their work or plan; to be destructive' (K. H. Lun, personal communication). Three Chinese subjects gave this interpretation, and one gave a similar interpretation, namely 'to drag someone to your position'. Although nine Chinese subjects gave responses that were identical or similar responses to those of the English-speaking subjects, six of them qualified the interpretation 'to trick someone' with 'to cheat; to set up someone'. This indicates that what the Chinese subjects mean by 'to trick someone' might be different from what the English subjects mean. This could be due to their poor knowledge of English. If we assume these six responses to actually mean 'to trick someone so as to obstruct him/her from proceeding', then we have a high number of Chinese-speaking subjects
responding differently from the English-speaking subjects, but on the same basis (i.e. transferring a metaphor from one's own language). Two Chinese-speaking subjects wrote that they knew the English expression *to pull someone's leg*, but they also wrote that the Japanese expression had the same meaning as the English metaphor.

Another example in which there was striking difference between the interpretations by the English speakers and by the Chinese speakers was (A):

(A) kare-wa kao -ga hiroi
he -TOP face-SUB wide

'He has a wide face'

10 Chinese-speaking subjects gave the interpretation 'knows many people; well-known; appears in many places', which is the metaphorical meaning of this expression in Japanese. There is a Chinese expression which can be literally translated as 'his face is wide', which means that 'he knows many people, or that he is well connected' (M. Ip, personal communication). Only one English speaker interpreted the Japanese expression in this way, while the other English speakers gave varied responses.10 Eight English speakers interpreted the metaphor as meaning 'honest; open; friendly'. The explanation for this interpretation given by one of the subjects is that a person who has a wide face would have all his/her facial expressions exposed and thus presumably would have nothing to

10 This English speaker did not state that he/she knew the metaphorical meaning of the Japanese expression. Presumably he/she was able to guess the meaning.
hide.

Another example in which there was a similar contrast between the Chinese speakers and the English speakers was (I):

(1)  shiroi me-de miru
     white eye-INST look

'to look with white eyes'

In Chinese, 'to look with white eyes' means 'to show disapproval; to regard someone as insignificant' (K. H. Lün, personal communication) or 'to despise, or to look down on someone' (M. Ip, personal communication). The Japanese expression has the same metaphorical meaning. All nine Chinese-speaking subjects who responded interpreted the Japanese expression in this way. In contrast, the interpretations given by the English speakers were extremely varied. It was difficult to discern the basis for some of the interpretations, but the interpretation of white to mean 'innocent' is prevalent in the English language as it is in many other languages (cf. Kikuchi & Lichtenberk 1983), and this perhaps led to the notion that 'white eyes' meant 'unbiased opinion'. However, one subject who gave this response wrote that 'white' meant 'no colour', and therefore he/she interpreted the metaphor as 'to view something with no previous judgement'. On the other hand, some of the subjects who gave the interpretation 'biased opinion' based it on the interpretation of white to mean 'pertaining to white people'. Another explanation given by a subject who gave this response was: 'when you look with white eyes, then you cannot see the whole picture'. 'Shocked; surprised' may come from relating
the Japanese expression to the English expression to turn up the white of one's eye, meaning 'in astonishment and horror'; the interpretation 'to be angry' may come from the English expressions white with rage or to roll one's eyes in anger. The diversity of the interpretations given by the English speakers suggests that if there is no established metaphorical expression in one's own language which can be clearly identified as being similar to an unfamiliar metaphorical expression in another language, the semantic property of the unfamiliar expression which the recipient (hearer/reader) may seize on in order to make sense of the expression is unpredictable. Thus, one cannot predict whether the recipient (hearer/reader) will take up the semantic property of white to mean 'pure and innocent', or the semantic property of 'of or pertaining to white people' or the semantic property of 'colourless'. It is also unpredictable how the hearer/reader will relate the situation described in 'looking with white eyes' to his/her own experience. One subject wrote that when you are scared, your eyes are wide open and you show the whites of your eyes more than you do usually. Another subject wrote that when you are angry, a lot more of the eye is visible; another wrote that blind people often have white eyes; and yet another thought that crazy or insane people show the whites of their eyes more than normal people.

The results of this survey suggest some of the strategies people use in interpreting unfamiliar metaphors in another language. The results show that on encountering an
unfamiliar metaphor, the hearer will try to relate the expression to a similar expression in her own language. This seems to be the dominant tendency. If no corresponding expression can be found, the hearer then tries to make use of the semantic properties of the individual words in the expression, or tries to envisage what is described in the expression, and relate it to his/her own experience.

In this survey the Japanese metaphorical expressions were given in isolation; under normal circumstances, one would have a context which might shape the direction in which the expression is interpreted. The results of the survey are thus suggestive rather than definitive of the kind of strategies people employ in interpreting unfamiliar metaphors. Be that as it may, the survey succeeds in showing that metaphors in one’s own language can influence one’s interpretation of a metaphor in another language and also in showing the role played by one’s experience in the interpretation.
6. LANGUAGE AND COMPREHENSION

In Chapter 4, I presented a picture of language as largely a representation of particular perceptions of reality which have become conventionalised in a language community. In Chapter 5, I showed that the establishment of such perceptual categories in a language may greatly interfere with the decoding of unfamiliar metaphors from another language; and it can also greatly limit the encoding of ideas, that is to say, a perception different from that which is established in the language would be more cumbersome to encode than the perception which is already encoded in an established linguistic expression.

In the following sections of this chapter, I will be concentrating on how we overcome these limitations imposed on us by our own language.

6.1 The toolmakers paradigm

In Chapter 2, I began my discussion of semantic theories with what Reddy (1979) calls the 'conduit metaphor'. The conduit metaphor represents the view held by many semanticists that language is a set of signals which 'contain' human thoughts or feelings. Reddy's alternative to the conduit metaphor is what he calls 'the toolmakers paradigm': A group of people live in separate compartments with totally different environments. They cannot leave their compartments but can communicate with each other by means of written messages.
When a person receives instructions on how to make a tool from another person, she adapts the instructions in terms of her own environment and creates her own tool which may be slightly different from what another person living in a different compartment would create. In the toolmakers paradigm, language is viewed as a set of signals which neither 'contain' nor replace human thoughts and feelings. There is no means whereby we can send our internal thoughts, feelings, and perceptions to anyone. These are unique to each one of us and are the results of our own experience. The only thing we can actually do is send signals to each other which only crudely capture the outline of our thoughts and feelings. In order to compensate for this, people need to make a real effort in communication. The hearer must try to understand the speaker's thoughts, feelings, environment, or experience. In doing so, she will use the knowledge she has accumulated through her own experience. The hearer's role, which distinguishes the toolmakers framework from the conduit framework most clearly, is that of trying hard to make out what the speaker is saying. By using her own knowledge, the hearer attempts to reconstruct the speaker's thought in her own mind. Without such an effort on the hearer's part, communication is certain to go astray because of the inherent crudeness of language. This view of language is based on the assumption that it is the people who make sense of words rather than assuming that words themselves have meanings.

I adopt Reddy's emphasis on the importance of the hearer's
role in communication. I will argue that the frame associated with a word only provides a general outline of the setting and concepts associated with the word and that the details of the frame are provided by the hearer by means of relating the frame to her knowledge which is based on her experience.

6.2 Understanding sentences

The case study of mabusu in Chapter 5 demonstrated that people associate a particular frame with a word. From the frame, we are able to know what kind of words Japanese speakers expect mabusu to co-occur with. If the frames of the words in a sentence fit together in that they are associated with each other in their respective frames, then we can say that the concepts associated with the sentence fit our experience. For example, in sentence (1) below the frames of the co-occurring words fit together, and the combination of the concepts fits our experience as to what kind of object mochi 'rice cake' is, what sort of things are done to it, what kind of object kinako 'soy bean flour' is, etc.

(1) mochi -ni kinako -o mabusu
   rice cake-IO soy bean flour-DO sprinkle
   'cover rice cake with soy bean flour'

If the frames of the co-occurring words are in conflict, this is because the combination of the concepts represented in the sentence does not fit our experience. For many speakers of Japanese, the concepts represented in sentence (2) conflict:
(2) biiru-ga sameru
   beer -SUB cool down
   'the beer will get cold'

This is because the speakers' understanding of what kind of object beer is conflicts with their idea of what the concept of sameru is associated with. In such cases, the sentence is considered by Japanese speakers to be an unacceptable collocation. However, I believe that collocations are not rejected readily. When people hear/read a sentence, they first try to make sense of it. That is, they try to find a way to expand their frames of the words combined in the sentence so that they can be accommodated to the concepts encoded by the co-occurring words. Take, for example, sentence (3):

(3) tarako -o gohan-ni mabusu
   fish roe-DO rice -IO sprinkle
   'to sprinkle fish roe on rice'

Although the prototypical frame of tarako would be an item of food which is a mass of cod eggs within the ovarian membrane, in (3) tarako would be interpreted as dried fish roe crumbled into small pieces. This is because in (3) tarako co-occurs with the verb mabusu, which is associated with the sprinkling of a powdery substance. In other words, the prototypical frame which is evoked by the word tarako can be modified to fit in with the frame of mabusu. In processing language, hearer/readers work on the following assumption:

---

1 The sentence is unacceptable in the same way as it is unacceptable to say I wrote a picture.
Hearer's assumption of motivated word use

The speaker has good reasons for using the combination of words (that is, the sentence is motivated).

This assumption leads the hearer/reader to try her best to find the motivation for the words used by the speaker. In order to do so, she often has to look for information not directly given in that particular sentence.

In the following sections, I give a brief account of some experiments conducted by psychologists to illustrate the range of knowledge structure we bring into the understanding of linguistic expressions.

6.3 Understanding and recall of linguistic expressions

The results of experiments by Johnson, Bransford and Solomon (1973), Bransford, Barclay and Franks (1972) and Bransford and Johnson (1972), compiled by Bransford and Johnson (1973), indicate that in memorising linguistic input people store not only the linguistic forms given, but also information which they themselves provide by drawing on a wide range of prior knowledge.

6.3.1 Experiment 1: Association of instrument with verb

Johnson, Bransford and Solomon (1972) found that subjects who were given a recognition task in which they were asked to identify sentences which they had actually heard, wrongly identified instruments used to carry out acts described in a passage as being included in the passage they had heard.
The subjects heard the following passage which was designed to suggest particular instruments involved in the action described:

(4) John was trying to fix the bird house. He was pounding the nail when his father came out to watch him and to help him do the work. (Bransford & Johnson 1973:387)

Compared to the subjects of the control group who were given the same story with the verb pounding replaced with looking for, the subjects who heard the above passage were more likely to wrongly identify the following passage with the critical instrument inference item hammer in it as the passage they had heard:

(4') John was using the hammer to fix the bird house when his father came out to watch him and to help him do the work. (Bransford & Johnson 1973:388)

6.3.2 Experiment 2: Inferred consequences

In the same study, Johnson, Bransford and Solomon (1973) also found that subjects often falsely recognised the consequence which they inferred from hearing a passage.

The passage they heard was the following:

(5) It was late at night when the phone rang and a voice gave a frantic cry. The spy threw the secret document into the fireplace just in time since 30 seconds longer would have been too late. (Bransford & Johnson 1973:389)

The results of the study showed that compared to the control group, the subjects who heard passage (5) were more likely to

---
2 This association of concepts represented by the words pounding and hammer can be explained in terms of the frame associated with the word pounding which might include the instrument hammer.
think that they had heard the following critical recognition item:

(5') The spy burned the secret document just in time since 30 seconds longer would have been too late. (Bransford & Johnson 1973:389)

6.3.3 Experiment 3: Inferences of spatial relations

In a study conducted by Bransford, Barclay and Franks (1972), the subjects were given a description of the following type:

(6) There is a tree with a box beside it, and a chair is on top of the box. The box is to the right of the tree. The tree is green and extremely tall. (Bransford & Johnson 1973:386)

The hypothesis made by Bransford, Barclay and Franks was that upon hearing such a description, the subjects would be able to make inferences about the spatial relations among the objects in the description, such as the chair is to the right of the tree or the tree is to the left of the chair. In a recognition task in which the subjects were asked to identify the sentences which they had actually heard, Bransford, Barclay and Franks found that the subjects were more likely to choose a sentence like the tree is to the left of the chair than a sentence which violated the inferable spatial relationship: for example, the chair is to the left of the tree.

6.3.4 Experiment 4: Justifying the relation between two events

Bransford and Johnson (1973) also report another false recognition study where the relations between two events described in a sentence had to be justified. One such
sentence was as follows:

(7) The floor was dirty because Sally used the mop.  
(Bransford & Johnson 1973:389)

Sentences like (7) were included in stories. The control group was given the same stories except that the critical item because in sentence (7) was replaced with so. When the subjects were later asked to identify sentences which they thought were identical to those presented in the story, compared to the subjects in the control group the subjects who were given the story with sentence (7) in it were more likely to identify sentences which contained information inferable as the antecedent condition; that is, they assumed that they heard the sentence The mop was dirty.  

6.3.5 Experiment 5: Semantic prerequisites for comprehension

In the last of the experiments discussed above, the subjects were in fact creating a context which would make sense of the sentence The floor was dirty because Sally used the mop. In the next set of experiments, the linguistic input given to the subjects was manipulated so as to make it difficult for the subjects to know which knowledge they were to access in order to make sense of the linguistic input. The subjects heard the following passage:

(8) The procedure is actually quite simple. First you arrange things into different groups. Of course, one pile may be sufficient depending on how much

3 (7) also has what Sweetser (1990) calls the 'epistemic conjunction reading'. In the epistemic conjunction reading, (7) would mean 'I conclude that the floor was dirty, because I know Sally used the mop'. In this reading too, the knowledge that a mop is used to clean a floor when the floor is dirty is called up to justify the use of because.
there is to do. If you have to go somewhere else due to lack of facilities, that is the next step, otherwise you are pretty well set. It is important not to overdo things. That is, it is better to do too few things at once than too many. In the short run this may not seem important but complications can easily arise. A mistake can be expensive as well. At first the whole procedure will seem complicated. Soon, however, it will become just another facet of life. It is difficult to foresee any end to the necessity for this task in the immediate future, but then one never can tell. After the procedure is completed one arranges the materials into different groups again. Then they can be put into their appropriate places. Eventually they will be used once more and the whole cycle will then have to be repeated. However, that is part of life. (Bransford & Johnson 1973)

After hearing the above passage, the subjects were first asked to rate the comprehensibility of the passage on a 7 point scale where 1-point meant 'very hard to comprehend' and 7-points meant 'very easy to comprehend'. They were then asked to recall and write down as many ideas from the passage as they could. Two control groups were given the same passage, but one group was told that the topic was 'washing clothes' before being presented with the passage, while the other was told what the topic was after hearing the passage. The mean comprehension ratings and mean numbers of ideas recalled are presented below (from Bransford & Johnson 1973:401):

<table>
<thead>
<tr>
<th></th>
<th>No Topic</th>
<th>Topic After</th>
<th>Topic Before</th>
<th>Maximum Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehension</td>
<td>2.29</td>
<td>2.12</td>
<td>4.50</td>
<td>7.00</td>
</tr>
<tr>
<td>Recall</td>
<td>2.82</td>
<td>2.65</td>
<td>5.83</td>
<td>18.00</td>
</tr>
</tbody>
</table>

The results show that the subjects who were not given the topic as well as those in the control group who were given the topic after hearing the passage rated the passage as low on
the scale of comprehension and also produced low recall scores. On the other hand, the subjects who were told what the topic was before hearing the passage rated the passage high on the scale of comprehension and achieved high recall scores. Bransford and Johnson conclude that the achievement of the Topic Before group is due to the way in which they can generate ideas that are consistent with the topic.

Thus, although knowledge acquired prior to the experiment may sometimes be relevant in the recall of linguistic input, that alone cannot account for the large advantage of the Topic Before subjects. The results of this experiment indicate that having relevant knowledge is not sufficient to insure comprehension; that relevant knowledge must be activated during the ongoing process of comprehension in order to be useful.

In order to test this hypothesis, Bransford and Johnson devised an experiment where the subjects were presented with 'easy' sentences and with 'hard' sentences. In the easy sentences, the relations between the contents of the clauses were transparent. In the hard sentences, the relations between the contents of the clauses were opaque:

(9) Easy: The account was low because Sally went to the bank. The car was moved because he had no change.

Hard: The notes were sour because the seam was split. The haystack was important because the cloth ripped. (Bransford & Johnson 1973:404)

A second group was given the same sentences, except that each
sentence was preceded by a context cue: withdrawal, parking meter, bagpipes, and parachute, respectively. As Figures 1 and 2 below show, there were marked differences in recall scores between the two groups. The presentation of context cues significantly reduced the difference in recall scores between the easy sentences and the hard sentences.

Figure 1 Mean number of sentences recalled on successive learning trials by group 1 who were not given context cue

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4 These figures are taken from Bransford and Johnson (1973:405). However, in Bransford and Johnson (1973) the scores for the first group and the scores for the second group are combined in one figure. I found this confusing, so I have decided to separate the scores for the two groups.
It can thus be concluded that the difficulty in comprehension does not lie in the linguistic input itself but in the ease or difficulty with which hearers can find a way to make sense of the input.

6.3.6 Experiment 6: Recall of linguistic form

such as (10):

(10) The spoon is to the left of the knife.
The plate is to the right of the knife.
The fork is in front of the spoon.
The cup is in front of the knife.

(11) shows the arrangement of the objects which is consistent
with the descriptions in (10).

(11) spoon     knife     plate
      fork      cup

Mani and Johnson-Laird (1982) found that in a recall test
similar to that performed by Bransford, Barclay and Franks
(1972) (cf. 6.3.3), subjects tended to confuse items which
were inferable from the description with those which they had
actually heard. This is consistent with the findings of
Bransford, Barclay and Franks (1972). However, Mani and
Johnson-Laird gave another group of subjects another series of
spatial descriptions such as (12):

(12) The spoon is to the left of the knife.
The plate is to the right of the spoon.
The fork is in front of the spoon.
The cup is in front of the knife.

Whereas (10) has only one arrangement of objects consistent
with the descriptions, (12) has at least two different
arrangements consistent with the descriptions:

(13a) spoon     knife     plate
      fork      cup

(13b) spoon     plate     knife
      fork      cup

Mani and Johnson-Laird found that in a recall test, subjects
who were given the determinate descriptions in (10) recalled

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5 The arrangement of objects described in (10) can also be
considered indeterminate in that the interpretation of in front
may vary from person to person.
the gist of the descriptions much better than the subjects who were given the indeterminate descriptions in (12). However, Mani and Johnson-Laird also found that the subjects who were given the indeterminate descriptions recalled the original linguistic form of the descriptions better than the subjects who were given the determinate descriptions. Johnson-Laird concludes:

A plausible explanation for the pattern of results is that the subjects construct a mental model for the determinate descriptions but abandon such a representation in favour of a superficial linguistic one as soon as they encounter an indeterminacy. Mental models are relatively easy to remember but encode little or nothing of the form of the original sentences on which they are based, and subjects accordingly confuse inferable descriptions with the original sentences. Linguistic representations are relatively hard to remember, but they do encode the linguistic form of the sentences in a description. (Johnson-Laird 1981:358)

6.4 Mental models and translation
In the subsequent sections, I discuss my view of the process of translation which the results of the experiments presented above provide evidence for.

6.4.1 Mental models as an interface between the SL and the TL
I draw two main points from the set of experiments discussed above. The two points are taken as assumptions for the discussion which follows:

a) The prototype frames associated with the words contained in a linguistic expression provide a general outline of an image associated with the linguistic expression. The details of the image, such as different aspects of the setting, the specific properties of the concepts in a frame, the link between the concepts in different frames associated with different words, etc. which are not specified by the linguistic expression are supplied
by the hearer/reader’s knowledge based on her experience.

The image associated with a linguistic expression which is a function of the prototype frames evoked by the words in the expression and the details of the frame provided by the hearer/reader’s knowledge will be called the ‘mental model’ associated with the linguistic expression.

b) The understanding of a linguistic expression is achieved when the hearer/reader is able to construct a mental model which she thinks fits the linguistic expression.

On the basis of these assumptions, I propose the following hypothesis. As the hearer/reader receives linguistic input, she simultaneously constructs a mental model based on the linguistic expression. In translation, the hearer/reader encodes (or rather re-encodes) this mental model---based on the SL---into the linguistic representations of the TL. In other words, the mental model acts as an interface between the SL and the TL. If the hearer/reader cannot understand the SL input, that is, if she cannot construct a mental model from the SL input, strictly speaking, she cannot translate. Understanding the SL is a crucial part of the translation process. However, if the hearer/reader is in a situation where she has no choice but to translate the SL, she will produce a translation which is a word-for-word translation accomodated to the grammar of the TL. In other words, it will be what is called a ‘literal’ translation.

6.4.2 Defining translation

What I call ‘translation’ in this chapter is the process of re-encoding in the TL a concept which is encoded in the SL.
I assume the process to take place in the mind of a bilingual speaker of the SL and the TL. As I mentioned above, I am proposing that the process of translation involves constructing a mental model associated with the SL, and re-encoding that mental model into the linguistic representations of the TL. After repeatedly evoking a mental model from the SL and repeatedly re-encoding that model into the TL, a translator may reach a stage where she bypasses the mental model stage and mechanically pairs an expression in the SL with an expression in the TL (or she can be trained to pair such expressions without going through the mental-model stage). I am not concerned with such cases, since I consider that to be a by-product of repeating the translation process I am talking about. Before such pairing of linguistic expressions becomes established in the mind of the translator, she has to go through a stage where she understands the SL text by associating it with a mental model and she then uses the mental model as a basis for constructing the TL text.

6.4.3 Defining mental models
The frame associated with a word is what I equate with word meaning. It will be recalled from Chapter 5 that the frame associated with a word provides the prototypical setting in which the word is used, and the concepts prototypically associated with the word. Not all uses of the word will fit the prototype frame exactly. In such cases, the hearer/reader will use her knowledge gained from her experience to try and fit the use of the word to its prototype. The hearer/reader
understands the following sentence, which was given in Section 6.2, by activating her knowledge related to tarako 'fish roe', and by providing relevant properties of the object so that it can fit the prototype frame:

(14) tarako -o gohan-ni mabusu
    fish roe-DO rice -IO sprinkle

'to sprinkle fish roe on rice'

Without activating the knowledge that fish roe can be dried, and that dried fish roe can be crumbled into pieces, the prototype frame for tarako may only provide a non-dried concept of fish roe, and the frame will not fit in with the frame of the verb mabusu. The totality of the frames of the words in a linguistic expression and the knowledge activated by the frames in order to make the frames fit together is what constitutes a mental model. A mental model is a picture-like image associated with a linguistic expression. The details of the image, such as the image of dried fish roe crumbled into pieces, are not described in (14), but they are evoked by the linguistic expression. Some parts of an image may be specific, other parts may be abstract or even absent. However, the image is always malleable so that more details can be filled in, modified, taken out, etc., according to the new information gained from subsequent linguistic input.

Since a mental model is activated by the frames associated with the SL text, one cannot say that the model is completely language independent. However, as the tarako example shows,

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6 One could also describe mental models as being movie-like in that time sequence will also be part of the model.
the knowledge used to make sense of the frames is more
experience dependent than language dependent. In the
following section, I describe the separability of mental
models from linguistic forms.

6.4.4 The separability of mental models from linguistic forms

Very often I cannot recall whether I saw a particular film in
Japanese or in English although I can recall the content of
what was said. From talking to other people who frequently
switch between languages, I have found that my experience is
not unique. The experience shows that I have forgotten the
actual linguistic forms which were used in the film but have
retained in my memory the mental models I constructed from the
linguistic forms. From the mental models, I am able to
reconstruct what might have been said in the film. I am able
to do this in both Japanese and in English. My reconstructed
linguistic forms may be different from the actual forms used
in the film, but the gist of the expressions would be similar.

This experience suggests that a linguistic expression evokes a
mental image of a scene with objects, individuals, states,
acts, etc. related in particular ways. An image which was
originally evoked by a linguistic form can be retained in the
mind independently of the linguistic form by which it was
evoked. The image in the mind of the speaker can be encoded

7 It should also be kept in mind that since a translator
knows from the outset that she has to render the SL into the TL,
she may construct her mental model to fit her purpose right from
the beginning and provide details of the frame which are based
on the experiences shared by the TL speakers.
into a linguistic form just as she can encode images (perception) of her experience regardless of whether the image was evoked by a linguistic form or not. When I try to reconstruct the linguistic form I may have heard in a film (English or Japanese), I encode into linguistic form an image which was originally evoked by the linguistic form which actually occurred in the film.8

6.4.5 Cognitive system vs. cognitive capacity

Consider another kind of phenomenon related to the separability of linguistic form from a mental model. The students who participated in Case Study-2 (see Section 5.3) were told after they had answered the questionnaire what the Japanese metaphors actually meant in Japanese. The majority of the English speaking students had thought that the metaphorical expression (15) meant 'to trick someone' because of the English metaphorical expression to pull someone's leg:

(15) ashi-o hipparu
    leg -DO pull

However, when they were told that the metaphorical meaning of (15) in Japanese is 'to prevent someone from going ahead with what she wants to do', all of them said that they were able to

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8 This process of translation does not seem very different from what a person might do in a monolingual situation if she were trying to recall what was said in a linguistic discourse. If she heard the discourse some time ago and can no longer recall the exact words used but does remember the gist of it, that is, she can recall the mental model she constructed when she heard the utterance, what she does is not unlike what the translator does. She will recall the mental model and try to re-encode the model into a linguistic form.
understand how the metaphorical meaning was motivated by the meanings of the constituents. The reason why an English speaker can perceive this link between the meanings of the constituents and the metaphorical meaning even if she may never have lived in a Japanese speaking community is because she can relate the characterisation provided in the expression to her own experience of what may happen when someone pulls someone else’s leg. The experience of pulling someone’s leg which is shared both by English speakers and by Japanese speakers has provided motivation for two different perceptions which have become conventionalised in the respective languages. In the English metaphor, the act of pulling someone’s leg is seen as something that one does to tease someone, catching the person unaware and making her trip (cf. Partridge 1973); in the Japanese metaphor, it is seen as holding onto the leg of a person who is trying to advance forward. Two different perceptions of one and the same type of experience have become established in English and in Japanese. However, this does not mean that English speakers cannot perceive the experience in the same way as that which is established in the Japanese metaphor, or that Japanese speakers cannot perceive the experience in the same way as that established in the English metaphor.

Lakoff (1987:310) distinguishes between 'cognitive systems' and 'cognitive capacity'. A cognitive system is the organisation of metaphorical concepts which underlies the semantic extensions of words and metaphorical meanings of
phrases established in a language (see Section 4.5.1.2). Cognitive capacity, on the other hand, is the language-independent human imaginative capacity which allows people to construct concepts and to categorise concepts. The case of to pull someone’s leg shows that the cognitive systems of Japanese and English differ, but since both English speakers and Japanese speakers have the same cognitive capacity, they are able to understand a perception of an experience other than that which is established in their own languages.

6.4.6 Encoding a new perception
The case I discuss in this section involves Japanese speakers in an English speaking community adopting a metaphorical concept which links two conventional signs in English and applying it to Japanese. The English metaphorical expression is to pick up used in a sentence such as I have to pick up the children from school. In contrast to the literal meaning of pick up which is ‘to lift’, pick up in the above sentence means ‘to stop at a place in order to take someone (or something)’. The literal meaning and the metaphorical meaning are linked by a metaphorical concept which can be characterised as something like TO STOP AT A PLACE IN ORDER TO TAKE SOMEONE IS TO LIFT SOMEONE UP. This metaphorical concept is not part of the conceptual system of Japanese. The act of collecting someone from a particular place is represented by the verb phrase mukae-ni iku, literally ‘to go for the purpose of receiving’ as in (16):
The act of lifting an object is represented by the verb *hirou* as in (17):  

(17) *gomi*-o *hirou*  
rubbish-DO pick up  

However, I have heard many Japanese people living in Auckland use the following expression:  

(18) *kodomo*-o *gakkoo-kara hirou*  
children-DO school-from lift  
lit: 'to lift the children from school'  

The use of *hirou* to mean 'to stop at a place in order to take someone', as in (18), is so prevalent among the Japanese living in Auckland that I have found that some of the Japanese had come to think that it was an established usage in Japanese. The use of *hirou* in (18) can be explained in the following way. The Japanese speakers, who have the same cognitive capacity as the English speakers, were able to perceive the metaphorical concept underlying the English use of *pick up* to mean 'to stop at a place in order to take someone'. This metaphorical concept motivated the speakers to extend the meaning of *hirou* to include 'to stop at a place

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9 The verb *hirou* is used only for lifting objects. In the case of lifting people, a compound verb such as *daki-ageru*, which means 'to embrace and lift', is used.

10 Sentence (18) is unacceptable in standard Japanese.
in order to take someone.' Although this extended use of hirou is limited to a small number of Japanese people living in an English speaking community, the phenomenon gives us insight to how the meaning of a word can become extended. If word meanings were rigidly fixed, and if there were no room for a language user to extend the meaning of a word when she perceives a new link between the concept provided by the frame of the word and another concept, then the use of hirou in (18) would not be possible and we would not expect other Japanese speakers to understand the sentence. However, the fact that the Japanese speakers in Auckland use hirou in the extended meaning, and the fact that other Japanese people, including those who have not lived in an English speaking community, can understand the use indicates that word meanings are not objectively defined by means of a fixed set of formal semantic features (cf. Katz and Fodor 1963). This takes us back to our notion of prototype frames. As I have argued, there is a prototype frame associated with a word, but the details of the scene or the concept, and the relation between the concepts can be modified according to experience.

11 I think that the reason why a Japanese speaker might want to use a new metaphorical concept rather than use the Japanese expression mukae-ni iku lit: 'to go to receive' in sentence (18) has to do with the concept of casualness, or ease with which one can do the collecting which is reflected in the metaphorical concept underlying the English expression to pick up. This concept of casualness is not present in the frame of mukae-ni iku. In New Zealand, unlike in Japan, most people pick up others by car. If a Japanese speaker in New Zealand wanted to incorporate the casualness associated with the English metaphorical expression, she might do so by introducing the metaphorical concept TO STOP AT A PLACE IN ORDER TO TAKE SOMEONE IS TO LIFT to motivate the use of hirou to mean 'pick up'.
6.4.7 Shared experience

Traditionally, differences in shared knowledge between the SL speakers and the TL speakers have been discussed in theories of translation in relation to differences between cultures. It is said that if the speakers of the two languages share a cultural/historical background, the two languages are more easily intertranslatable. This description, however, is misleading. It is misleading in that it sounds as if one language community has one culture and it is either the same as or different from that of another language community. As discussed earlier, the knowledge related to a linguistic input can be a variety of things; there is not just one body of knowledge shared by all speakers of the language, and not all knowledge is applied to every linguistic input. Each linguistic input evokes some part of the hearer’s knowledge. Some of this knowledge may be shared by all human beings, or it could be knowledge about the community she lives in. Or, it could be a more specialised knowledge she shares only with a small group of people in the community. The knowledge could also be about certain conventions of the language; conventions of the use of the language, such as recognition of sarcasm which is evoked by the linguistic input. The point is that each linguistic input will be related to a different kind of knowledge, and there is nothing that may be considered one knowledge or culture shared by all members of the language community. And there is no one large general knowledge which is related to all linguistic input.
6.4.8 Literal translation vs. free translation

In this section I discuss the second part of my hypothesis which was presented in section 6.4.1. There I claimed that in translation the hearer/reader encodes (or rather re-encodes) the mental model evoked by the SL text into the linguistic representations of the TL. This can only be done if the hearer/reader is able to construct a mental model on the basis of the SL text. If she cannot do that, she cannot, strictly speaking, translate. However, if the hearer/reader were in a situation where she had no choice but to translate the SL, she would produce a translation which would be a word-for-word translation rearranged to fit the grammar of the TL.

On the basis of my hypothesis, we can define literal translation as the act of rendering the SL text into what the translator thinks is the corresponding TL text without having a clear mental model associated with the SL text.\footnote{Although not included in the scope of this thesis, there are cases where the translator translates the SL text literally even if she can construct a mental model based on the SL text. This may be because she wants to give the TL audience information concerning the SL (such as the conceptual system of SL).}

Free translation, on the other hand, involves the process of constructing a mental model on the basis of the SL text and encoding that model into the linguistic representations of the TL.

In order to illustrate how important the construction of a mental model associated with the SL is in translation, I
conducted the following experiment using the 'Washing Clothes Text', which was presented in Section 6.3.5.

6.4.8.1 A case study of mental models and translation

In the experiment, I distributed copies of the 'Washing Clothes Text', half with the title 'How to Wash Clothes in a Washing Machine' and the other half without the title, to eight native speakers of Japanese who live in English speaking communities, and who have acquired competent knowledge of English, though their competence varied in degree. Two native speakers of English with near-native proficiency in Japanese also participated in the experiment: one was given the text with the title, and the other was given the text without the title. The subjects were simply asked to translate the English text into Japanese. The reason why a mixed group of English and Japanese native speakers was chosen was because the ability of some of the Japanese speakers to understand some of the sentence constructions and the colloquialisms in the text was not adequate, and I feared that the inability to translate in some cases would be caused by the lack of knowledge of English. The purpose of the experiment was to see how differently the subjects would translate the text into Japanese. A copy of the form distributed to the subjects is given in Appendix 7 together with the translations given by the ten subjects.

My prediction was that those who were not given the title of the passage would find it difficult to translate and would
resort to translating the passage literally, whereas those who were given the title would be able to provide a freer translation. This prediction was based on the assumption that without the title the subjects would not know which experience they could relate the passage to and would not be able to understand the text at a mental-model-construction-level, in which case they would resort to producing a word-for-word translation accommodated to the grammar of the TL. With the title, the subjects would be able to construct a mental model based on the SL text, and the mental model would enable them to replace abstract words with concrete words, provide additional information, discard misleading information, etc.

The results show that, as expected, all those who had been given the passage without the title found it difficult to translate and gave literal translations, without adding or changing any of the description. On the other hand, those who had been given the passage with the title replaced some of the general words with more specific terms. Listed below in the left-hand column are some of the words or phrases from the 'Washing Clothes' passage. The column in the middle contains the Japanese translations given by the subjects who had not been given the title. The column on the right contains the Japanese translations given by the subjects provided with the title.
<table>
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<tr>
<th>WITH TITLE</th>
<th>WITHOUT TITLE</th>
<th>TRANSLATION BY SUBJECTS</th>
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**TRANSLATION BY SUBJECTS:**

- a
- b
- c
- d
- e
- f
- g
- h
- i
- j
- k
- l
- m
- n
- o
- p
- q
- r
- s
- t
- u
- v
- w
- x
- y
- z
The survey shows that if the translator understands the SL text at the mental-model-construction level, the mental model can be a rich source of information enabling her to use more specific terms, provide additional information, discard misleading information, etc. The translator may choose to keep the text in a style similar to the original and not supply the additional information (as was the case with Subject K; see Appendix 4), but the point is that when the translator does have a mental model based on the SL text, she is not restricted to giving a literal translation. She is able to produce a free translation if she wants to.

6.4.9 The advantages of the hypothesis
The advantage of my hypothesis positing mental models as an interface between the SL text and the TL text is that because the translator is not seen as moving directly from language to language, no close correspondence between the linguistic forms of the SL and the TL needs to be sought. Greater emphasis is placed on the role of the translator in relating her experience to the frames associated with the SL text, and the role of the TL audience in relating their experience to the frames associated with the words of the translation. The hypothesis assumes that if the mental model associated with the SL text is an image which can be readily perceived by the TL speakers, translation will be relatively easy even if the two languages are typologically very different from each other. A mental-model image which is readily perceived by
the TL speakers is an image of an experience commonly encountered by the TL speakers. That is, it is set in a scene which is familiar to the TL speakers with concepts and relations among the concepts commonly perceived by the TL speakers.

The hypothesis explains why it is relatively easy to translate, say, a computer manual, even when dealing with two typologically different languages, such as Japanese and English. Both a Japanese speaker and an English speaker are likely to share experiences related to computers and so can construct similar mental models. In contrast, if the translator is to translate a computer manual into a language whose speakers are not likely to have had any experience with computers, the task becomes much more difficult. Her task, basically, is to describe her mental model of a computer by relating it to concepts which the TL speakers are familiar with so that they can construct a mental model similar to that of hers.

The hypothesis leads us to modify the often asked questions, 'Is translation possible?', and 'Can everything that can be said in one language be said in another language?'. The question to ask becomes, 'Can every language encode any mental model and can any mental model based on an SL be understood by any member of the TL community?' My answer to the question is 'Yes, every language can encode any mental model and any mental model based on an SL can be understood by any member of
the TL community'. The reason for this is not because, as Katz assumes, every language encodes the same set of propositions which are purported to exist independently of the language users, but because people everywhere have the same cognitive capacity and also because many of our experiences are similar, and even if our experiences do not overlap, a new experience can be characterised in terms of a familiar experience.

Even if we were able to perceive conceptual categories not encoded in the conventional signs of our language, translation would not be possible unless the tools of our language allowed us to encode new perceptions. I believe that we are able to encode new perceptions by means of language because sentences provide characterisations of concepts. A novel characterisation is understood because word meaning is not fixed but is associated with prototypical frames, and the meaning can be extended by relating the frame to our own experience.
In this chapter, I will tie together some of the major concepts introduced in this thesis. This will be followed by a summary of my views on meaning and translation.

I started this thesis by presenting the tradition in linguistics which views meaning as an objective entity, viz. Katz's (1978) Determinacy Thesis. In contrast to Katz's Determinacy Thesis, Quine (1960), Grace (1987), and Givón (1989) have argued that there is no common measure whereby linguistic expressions from different languages can be considered translation equivalents.

My own view is that the cognitive capacity shared by people everywhere and the large proportion of shared experience allows people to construct similar mental models, and that such mental models act as the interface between the SL and the TL. The advantage of mental models over Katz's notion of propositions as the interface between the SL and the TL is that the mental-model hypothesis can explain why two linguistic signs can be translation equivalents even if their constituent meanings are different, and it can also explain why the same constituent meanings are not always translation equivalents.

Grace's reality construction view was discussed in detail as the first step in looking at how linguistic signs encode
particular characterisations of our experience. Using Fillmore's (1982) notion of 'frames' and my notion of 'mental models', Grace's distinction between conventional signs and ad hoc signs can be characterised in the following way: Ad hoc signs are constructed from words which have individual frames associated with them. The meaning of the whole sentence is understood by relating the individual frames of the constituent words to our knowledge and by constructing a mental model which we think fits the frames of the constituents.

On the other hand, sentence-level conventional signs as a whole evoke a prototype frame associated with the entire sign in the minds of the majority of the members of the community, though the frames of the constituent morphemes will be included in the frame of the whole conventional sign. Thus, conventional metaphors, such as to be in deep water, don't count your chickens before they hatch, and to keep someone at arm's length have prototypical frames associated with the expression as a whole. We can compare the understanding of these conventional metaphors with how we understand novel metaphors. Novel metaphors, like ad hoc signs, are interpreted by taking the individual frames of the constituent words and making sense of the combination of frames based on our own experience.¹

¹ In arguing against the separation of literal and metaphorical meaning, Rumelhart (1979) claims that the process of comprehension is identical in both cases in that one selects a schema to account for the meanings of the constituents. Rumelhart's notion of 'schema' corresponds to my notion of
Another clarification which is called for is the distinction between Grace's reality model and what I call a 'mental model'. The most important difference is that Grace's reality models are constructed by linguistic signs, whereas mental models, although based on linguistic signs, are constructed by the concepts and the related knowledge that the language users associate with the linguistic signs. Grace's reality models are language-specific and represent what Lakoff (1987) calls the 'conceptual system' of a language. In contrast, mental models are to a large degree language independent. This is evidenced by the way in which a bilingual speaker can forget what linguistic form a mental model was originally based on.

The process of translation as conceived of in this thesis consists in first constructing a mental model based on the SL text and then encoding the mental model into the TL. The advantage of this model is that it explains why the translator can---in the translation---supply information that is not present in the linguistic forms of the SL text. As mentioned above, it also explains why two linguistic signs with different constituent meanings can sometimes be considered translation equivalents, or why two linguistic signs with the same constituent meanings can sometimes not be considered translation equivalents. Furthermore, it explains why it is relatively easy to translate between languages whose speakers

'mental models'. As evidence against the separation of literal and metaphorical meaning, Rumelhart cites the results of an experiment which show that in context non-literal meaning can be understood just as quickly as literal meaning.
share similar experiences, even if the languages are typologically very different from each other, whereas translation is more difficult if the speakers of the SL and the TL do not share similar experiences, even if the languages are typologically related. An additional advantage is that this model explains a common strategy used by many translators: the translator first produces a rough translation largely based on the SL text; she then puts away the translation for a while; later, she goes back to the rough translation to make improvements, but at this stage, she does not look at the SL text. If, at the final stage of the translation, the translator is not looking at the SL text, what could she be basing her translation on? My reply is that many translators put away their rough translations for a while in order to forget the linguistic forms of the SL text, while retaining the mental model constructed from the SL text. They then work on the rough translation by comparing it with their mental model of the SL text.

In this thesis, I have argued for a view of meaning according to which meaning is not an objective, clearly delineated, exhaustively specifiable entity, but an imagery anchored in human experience. The experience shared by a group of people can give rise to categories expressed by word-level conventional signs and can also motivate the ways in which people commonly talk about things. However, since such categories are based on the perceptions and experiences of the language users and do not exist on their own, there is no
guarantee that any other community will recognise exactly the same conceptual categories.

If we were to say that these categories are fixed, and that the speakers can never go beyond the limits of such conventional imagery, language would be very static. However, human experience and human perception of experience are not restricted in this manner. Our cognitive capacity allows us to perceive experiences in ways different from the perception encoded in the conventional signs of our language. Such novel perceptions can be encoded in language because word meaning is like an image based on our experience, and we can use a word to encode a new kind of phenomenon which we perceive as having some connection with the phenomenon that the word has been used to encode up till now. Such a novel application of a word can be understood because upon hearing the word, an image based on experience is conjured up in the hearer’s mind which allows her to make sense of the novel usage of the word. This dynamic aspect of language is a necessary condition for creative thought and is also what enables us to translate.
APPENDIX 1: Mistranslations of Conventional Signs

(Examples are taken from Koga 1983; all SL texts are by Agatha Christie; the titles of the SL texts are given in square brackets; the translators' names are given in parentheses)

I. Mistranslations of decoding

1. Irreversible binomials

(1) SL: They've done all they can to take the part of my flesh and blood. [The Body in the Library]

TL: marude watashi-no te -ashi-no yooni natte as if I -GEN arm-leg -GEN like be

hataraitekuremasita worked (Takahashi, Yutaka)

'They worked as my right arm'

2. Figures of speech

(1) SL: Don't mind my bark. It's a good deal worse than my bite. [Dumb Witness]

TL: Atashi-ga hoetate-temo kinishinaide okure. I -SUB bark -even don't mind please

Anta, issonokoto kamitsuite moratta hoo-ga ii you rather bite receive way-SUB better
to omotteru daroo ne PART think probably PART (Kashima, Shozo)

'Don't mind my bark. You probably think that you'd rather be bitten by me'

(2) SL: The medical evidence had been a bit above their heads. [Towards Zero]

TL: Igakuteki shoomei -mo baishin'in-no atama-ni medical evidence-also jury -GEN head -LOC

honno sukoshi-wa nokotteita slightly little -CNTR left (Tamura, Ryuichi)

'The medical evidence was in the back of the jury's mind'

(3) SL: We potted some of the beggars, and the rest took to their heels. [The Secret of Chimneys]

TL: Wareware-wa suunin-no kojiki-ni me -o tsukete sono we -TOP few -GEN beggar-LOC eye-DO attach that
ato-o tsukete itta dake-no koto desu
back-DO follow go only-NOM thing COP

'The only thing we did was that we spotted some beggars and followed the rest of them'

(4) SL: She's a bit long in the tooth, but she has a certain attraction. [Murder in Mesopotamia]

TL: Kanojo-wa chotto ha -ga dekasugiru kedo
she -TOP a bit teeth-SUB too big but
tashika-ni isshu -no miryoku -wa aru ne
certain-ADV a kind-GEN attraction-CNTR be PART

'Their teeth are a bit big, but she certainly has some sort of attraction'

3. Metaphors

(1) SL: Many dark women dye their hair blond; he had never before come across a fair woman who dyed her hair black. [The Mysterious Mr. Quin]

TL: Asaguroi hada-no onnatachi-ga minna kinpatsu-ni
light black skin-GEN women -SUB all blond -DIR
kami-o someru noni iro -ga shiro-no onna -wa
hair-DO dye but colour-SUB white-GEN woman-TOP
kesshite kuroi kami-ni some-na mono da
never black hair-DIR dye -NEG thing PART

'I women with a dark complexion all dye their hair blond, but women with pale complexion never dye their hair black'

(2) SL: 'Alibi, eh?' said the inspector darkly. [Death in the Clouds]

a) TL: 'Aribai desu ne" -to keibu -wa fukigen -ni
alibi COP PART -PART inspector-TOP bad mood-ADV
itta said

'"Alibi, is it?" said the inspector in a bad mood'
b) TL: "Aribai desu-tte" -to keibu -wa inkenna alibi COP -PART -PART inspector-TOP grim koe -de itta voice-INST said (Matsumoto, Kan) "'Alibi, you say?" said the inspector in a grim voice'

c) TL: "Aribai ka ne" -to keibu -wa futokuyooryoo na alibi eh -PART inspector-TOP obscure ADJ chooshi-de itta mode -INST said (Koga, Masayoshi) "'Alibi, eh?" said the inspector in an obscure way'

(3) SL: "I'd rather not know who did it. I'd rather not even think about it." "Ostrich," said her husband. [Ordeal by Innocence]

TL: "Sore-wa gooman da" -to otto -qa itta that -TOP arrogant COP -PART husband-SUB said (Ogasawara, Toyoki) "'You're being arrogant," said her husband'

(4) SL: The other man could be better described as wiry and lean. [The Seven Dials Mystery]

TL: Moo _ hitori-wa harigane-no yooni yaseta-to other one -TOP wire -GEN manner thin -PART keiyoo shite yokatta describe do good (Nakamura, Nozo) 'The other person could be described as being thin like wire'

II. Mistranslations of expressions with conventional functions

(1) SL: "Here's to you, Egg," said Sir Charles. [Three Act Tragedy]

TL: "Koko-ni _ anta-no -ga aru. Eggu" -to Chaarusu-qa here -LOC you -GEN-SUB exist Egg -PART Charles -SUB itta said (Nishiwaki, Junzaburo) "'Here is your's, Egg," said Charles'
APPENDIX 2: Questionnaire for Survey 1: Example sentences of mabusu

出身地__________________ 年齢__________ 男・女

① の動詞を使った例文を一つ あげて下さい。
例：ひたす
水に手をひたす。

① まぶす
APPENDIX 3: Questionnaire for Survey 2:
Rating sentences with mabusu

名前__________________________  出身地__________________________

まぶす
えびにうどん粉をまぶす。
魚に塩をまぶす。
夏は芝生に水をまぶす。
庭の木に肥料をまぶす。
おとうふにしょうゆをまぶす。
野菜に調味料をまぶす。
ごはんにおかかをまぶす。
おもちにあんこをまぶす。
びょうぶに金粉をまぶす。
APPENDIX 4: Questionnaire for Survey 3:
Example sentences of sameru

出身地_________________ 年齢_______ 男・女

②の動詞を使った例文を一つあげて下さい。
例：ひたす
水に手をひたす。

③ 冷める
APPENDIX 5: Questionnaire for Survey 4: Rating sentences with sameru

名前 __________________________ 出身地 __________________________

「さめる」の最も典型的な使い方と思われる文を1として、やや典型的、「言うかもしれない」、という順で番号をつり、「私だったら言わないけど、よその人は言うかも」というものには三角、「絶対言わない」というものにはバツを付けて下さい。

お茶がさめる
こはんがさめる
てんぷらがさめる
おふろのお湯がさめる
オープンがさめる
湯たんぽがさめる
薬を飲んだら熱がさめた
ビールがさめる
APPENDIX 6: Questionnaire for Case Study II: Interpretation of unfamiliar metaphors

Native language____________________
Other languages in which you have near-native fluency________
Age______ male/female

The italicised section of the following phrases are idiomatic expressions in Japanese. Each word is glossed in the first line and its literal translation is given in single quotes in the second line. Write in the parentheses what you think their idiomatic meanings are, then give your reasons as to why the literal meanings render the idiomatic meanings. If you know the Japanese idiom, please say so in your explanation.

Example:
noz-i-ni noru
wave on ride

'to ride on the waves'

(to seize the opportunity)
When you ride on a wave in the sea, the wave takes you far without much effort on your part, so to ride a wave means to take the opportunity to go far when it comes.

1. kare-wa kao -ga hiroi
   he -TOP face-SUB wide

   'He has a wide face'

   ( )

2. hito -o kuu
   person-OBJ eat

   'to eat someone'

3. mizu -o sasu
   water-OBJ pour

   'to pour water (on something)'

4. hito -no ashi-o hipparu
   person-GEN leg -OBJ pull

   'to pull someone's leg'
5. **ne -mo ha -mo nai hanashi**
root-also leaves-also NEG story

'a story which has no roots or leaves'

6. **ha -ga wku**
teeth-SUB float

'the teeth float'

7. **wakai hito -wa atoma-ga yowarakai**
young people-TOP head -SUB soft

'young people have soft heads'
8. mizu-ni nogasu
water-LOC flow

'to let something flow in water'

9. shiroi me-de miru
white eye-INST look

'to look with white eyes'

10. me-o tsoburu
eye-OBJ close

'to close one's eyes'
APPENDIX 7: Questionnaire for 'How to wash clothes in a washing machine'

The following is part of an experiment I am conducting as part of my PhD research on translation. Could you kindly follow the instructions given and return the results to:

Atsuko Kikuchi  
Asian Languages Dept.  
University of Auckland  
Private Bag  
Auckland  
NEW ZEALAND

Thank you for your co-operation.

Please translate the following English text into Japanese.

(HOW TO WASH CLOTHES IN A WASHING MACHINE)

The procedure is actually quite simple. First you arrange things into different groups. Of course, one pile may be sufficient depending on how much there is to do. If you have to go somewhere else due to lack of facilities that is the next step, otherwise you are pretty well set. It is important not to overdo things. That is, it is better to do too few things at once than too many. In the short run this may not seem important but complications can easily arise. A mistake can be expensive as well. At first the whole procedure will seem complicated. Soon, however, it will become just another facet of life. It is difficult to foresee any end to the necessity for this task in the immediate future, but then one never can tell. After the procedure is completed one arranges the materials into different groups again. Then they can be put into their appropriate places. Eventually they will be used once more and the whole cycle will then have to be repeated. However, that is part of life.
Translations of 'How to wash clothes in a washing machine' by subjects who had not been given the title

実は手順はけっこう簡単なのだ。先ず、ものをグループ分けする。もちろん分類する量によっては一つの山で充分かも知れない。設備が不足していていれば、場所をかえてやらないか否かかも知れないが、設備があれば、問題はないだろう。

やりすぎないことに留意しよう。最初のうち、これは重要なことではないように見えるかも知れないが、いつの間にか複雑化することもある。又、ミスをすれば、高くつくことがある。最初のうちは、手順は複雑に感じが、慣れると日常生活の一面になってしまうだろう。近い将来にこの作業が必要でなくなるとは考えにくいが、可能性はないとは言えない。

作業が終わった後、再び同じもののグループ分けをする。そうした後で、適切な場所に置くことができる。やがて、ものはは又使われ、今の手順を初めから繰り返すようになる。しかし、これが日常生活の一面である以上は仕方がない。

その手順はいたって簡単だ。まず初めにいくつかの異なったグループに分類する。勿論、その量によっては一山で十分であろう。もし設備がないためにはどこか他の所へ行かなければならないとしてもそれは次の段階であって、そうでなければ、かなりうまくやっていることになる。やり過ぎないことの大切だ。つまり、一時にやり過ぎるよりはやりすぎ過ぎるほうがまし。一見、このことはさして重要（なこと）とは思われないかもしれないが、だからがってしまうことはたやすい。間違いを犯すと、高くつくこともある。初めはその手順全体が複雑に思われるかもしれない。しかしこすぐに単なる生活の一側面になるだろう。この仕事が何故必要なのか、近い将来におけるその目的を予見することは難しい。しかし、必要性がないとは言えまい。その手続きが完了したらデータをまた異なったグループに分類する。そうしたら、それぞれ適切な場所へ入れることができよう。結局、それらはもう一度使用され、そのサイクルは繰り返されねばならない。しかし、それは生活の一部である。

方法は実際全く簡単です。まずいくつかのグループに分けます。もちろんどれだけ扱うかによっては、1山で十分な場合もあります。

設備不足のためにどこかよそへ行かなければならないうちればそれは次の段階です。そうでなければ大変良く準備されています。多くを扱い過ぎがないことが重要です。すなわち、一度にあまり多くを扱うよりは少なすぎる方がましいのです。さあしあってはこのことは重要に思われないかもしれませんが、やっていなことは簡単におこりうるのです。失敗はまた大変高くつきます。まず全行程は複雑にみえるでしょう。しかし、すぐに生活の別の面になってしまうでしょう。さあしあって、この仕事は必要性を予見することは難しいけれども、けっしてできないのです。その行程が終わると、それらの物をまたグループ分けします。そしてそれらは適切な場所へおかれます。最終的にそれらはもう一度使用され、全行程がもう一度くり返されるのです。しかし、それは生活の一部なのです。
そのやり方の手順というのは、実は、わりに簡単なのである。
先ず、仕分けをする。もっとも、その数量により、仕分けの要がない、一塊で済む場合もある。また、設備がないため他所の利用をよぎなくされることもあり、その場合は次の段階に入れる。その必要がない場合は、ここで準備はおおむね完了する。大事なことは、やり過ぎないこと。つまり、一度にやり過ぎるより、やり足りない方が良い。目先のこと
にとらわれていると、そんなことは大した事ではないと思われそうだが、無視すると、と
んでもないことになりかねない。それに、まかり間違えば、高くつく。このこと全ては、
一見、面倒な手順だと思われそうだが、やがて時が来れば、生活のある一面にすぎない、
ということになる。このような手順を踏むという仕事は、近い将来、必要でなくなるなどと
いうことは、起こりそうにない。とはいいうものの、明日何が起こるか分からないのが世の
常、この手順に従い、全てが完了すると、再度、仕分けにかかり、適材を適所に配列する。
最終的には、それらは再利用され、後は、これまでの繰り返しとなる。いやはや、これと
て人生の一コマである。

実際手順自体は易しいのです。まず物事を異なったグループに分けます。もち
ろん物事の量によって一つのグループだけで充分かもしれませんが、必要な設備
が無いために別の場所に行かねばならない場合はこれが次にやらねばならない
段階となりますがそうでない以上準備はそろっています。重要な事はやり過ぎ
ない事です。つまり一時のより少なくやる方が沢山減るより良いのです。この事
は短期的においては重要にと思われませんが混乱がおこりやすいです。まちがい
が高くつくかもしれません。最初はすべての手順が複雑にと思われますがしかし
すぐに馴れて生活の一面になります。近い将来においてこの過程を終える事が
必要かどうかを見通すのは難しいですがそんな事はわかりません。さてその過
程が完了したらその材料を別のグループにもう一度分けます。そうするとそれ
らは適した場所に置かれます。最後にそれらはもう一度使用されてそして全サ
イクルが繰り返されねばなりません。しかしながらそれは生活の一部です。
洗濯機での洗濯の仕方

洗濯の仕方はそれほどむずかしくはない。まず、洗い物を別々のグループに分けて整理しなければならない。洗濯の量によって違うが、もちろん少量の場合グループ一つにしてもかまわない。次は、設備がなければどこか外の所へ行く必要もあると考えられるが、そんな必要がないかぎり準備は大体できたと言える。重要なのはやり過ぎないことである。つまり、一度にあまり多くのものを洗うより、少なくても少量のものを洗う方がよい。これは始まりの段階ではそんなに重要なことと見えないかも知れないが、面倒なことが起こりやすく、間違えれば損しないとも限らないから、注意を要する。洗濯をするというのは最初は何においてもややこしいようであるが、その後に日常欠かさずにおけないものの一つになってしまうはずである。洗濯の必要性はいつかなくなるかというと、近い将来にその見通しがつかないだろうが、あとになってみないと分からないとも言える。洗濯の手続きを済ませたあとで、また洗ったものを別々のグループに分けて行く。それから、元の所に戻ればいい。やがて洗った服を再び着るとなるから、こういう手続きを初めから繰り返すことになる。しかし、これも日常生活なのだと思われる。

洗濯機で衣類を洗う方法

手順は、実のところいたって簡単である。まず、衣類を種別する。もちろん、洗濯するものの量によっては、ひとかたまりでよい。もし、次の段階の設備がないために、どこかそそへ行かなければならなかったら別だが、そうでなければ、準備完了だ。やり過ぎることが重要である。つまり、あまりにも多くのものを洗うよりは、少なすぎるほうがよい。まわり始めには、このことは重要に思えいかかもしれないが、からみ合いは、すぐに生じる。1つまちがえば高くつきもする。最初は、手順全体が複雑に思えるだろう。しかし、やがてそれは、生活の一部にすぎなくなるだろう。こうすることの必然性につながる結果を、直後に見越すことは難しいが、それは誰にも、わからないことである。その手順が完了したら、もう一度、衣類を分類する。そしてそれらは適切な場所へおさめられる。結局、それらはもう1度使用されるすべての行程がくり返されなければならないだろう。しかし、それは、生活の一部である。
《洗濯機の使いかた》

やり方は簡単です。まず、洗い物を仕分けします。ひと山は全体を見て、適量に。多すぎて、一度に出来ない時は、次にまわし、そうでなければ、それで準備完了。欲張って詰め込まないことが大切です。（この場合）、“おおよばざるは、過ぎたるにまさる”ということ。この点を甘く考えると、後で故障の原因になったりし、結局、高くついてしまったりします。最初は面倒だと思っても、すぐに、目をつけてしまうようになるものですね。すぐには、このやり方の良さは見としきにくいものの。むしろ、わからないものです。洗い終わった後で、また、生地別の仕分けをします。（木綿は木綿、化繊は化繊といった具合に）最後に、また、スタートさせ、二度洗いをしなければいけません。面倒かもしれませんが、洗濯しないとやっていけませんね。

注1）下線部はよく分かりません。

洗濯機での洋服の洗い方

手順は実際、かなり簡単です。まず最初に、洋服をいくつかのグループに分けます。もちろん洗濯する量によっては、一山で十分かもしれませんが。施設不足の為、他の場所へ行かなければならないとしたら、それは、次の段階ですが、そうでなければ、これで準備ができました。沢山やりすぎないことが大切です。と言うのは、一度に少すぎる量をやる方が、沢山やりすぎるよりいいのです。短期的観点からは、これは重要に思われないかもしれませんが、困難は容易に起こり得ます。又、間違いは高くつくかもしれません。最初は、手順全体が複雑に思われるでしょう。でもすぐに、ただのもう一つの生活の一面になるでしょう。すぐには、この仕事の必要性の終わりを予測するのは難しいので、最初は予測できないでしょう。作業が終わったら、又、洋服を違うグループに分類します。そうしたら、それらを適当な場所に置くことができます。結局、それらは又使用され、同じ過程が繰り返されなければなりません。しかし、これは生活の一部なのです。
洋服を洗たく機で洗う方法

手順は実はかなり簡単です。まず物を違った山に分けます。勿論量によっては一山で充分かもしれませんが、どこか別の場所へ行かなければならないうちは、それが第二段階になる訳ですが、そうでなければ、だいたいこれで準備完了です。物を入れすぎないようにすることが大切です。つまり多過ぎるより、少な過ぎるくらいがよいということです。これはちょっとの期間では大したことがないように思われますが、こみ込んだ問題が生じる可能性があります。まちがいは同時に高くつくこともあります。最初のうちは、全行程が複雑に思えることでしょう、しかし、しばらくすると、これも人生のただの一局面となってしまうでしょう。この仕事の必要性がなくなるとは、近い将来にはとても予知しにくいことですが、しかし、それは誰にも分からないことです。手順が完了したら、また物を違った山にわけ、それから適当な場所にしまうことができます。最終的には、物はまた使われ、全過程がそこで又繰り返されることになります。いずれにせよ、それは人生の一部分な訳です。
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