CHAPTER 2

REVIEW OF RELATED LITERATURE

2.1 MT and Difficulties of Translation

In the very first lecture of the Barker Lecture series on MT, it was pointed out candidly by Melby (1998) that translation is essentially difficult; and that it is not a trivial matter to produce a good translation even for one who knows the languages concerned well. The fact that most words have multiple meanings was highlighted in this lecture as one of the contributory factors to the difficulties in translation. In addition, it was pointed out that there are differences in meaning that appear insignificant until the subject-matter crosses over to the other language.

'If translation is difficult for a human, how about the computer?' This is the question one tends to ask when thinking about MT. This obviously was also the question envisaged by

Melby when he made the aforementioned assertion at the outset of the Barker Lecture.

In 1949, Warren Weaver, the director for science at the Rockerfeller Foundation and an important contributor to the development of information theory, once (in 1949)disseminated the following proposal for the development of MT: to get the computer to translate each word of the source text into an equivalent word in the target language, and then rearrange the result to fit the formal structure of the target language. This idea, which evidently has not worked very well all these years, has been commented by Waldrop (1987: 63) in the following terms: "The process would not be quite that simple." Waldrop's contentions for the difficulty of translation were again related to 'meaning': i) that some words have different meanings in different contexts; ii) that every language has idioms that make no sense when they are translated word for word

The above contentions of Melby and Waldrop can be seen to be in line with two fundamental standpoints of this dissertation, namely:

- Translating is a difficult task, not only in terms of conveying the source text meanings and information adequately, but also in terms of conveying them eloquently and in good language;
- Translating involves a complex cognitive process and therefore poses greater challenges to the computer than to the cognitive mind of the human.

2.2 MT and ¹Understanding of ²Human Language

While Melby and Waldrop identify the multiplicity of word meanings and their dependency on contexts as the source of difficulties in MT, on a different level, they trace such difficulties to issues revolving around understanding of human language. Together with other commentators of MT, they essentially attribute the inadequacy of MT to lack of understanding of human language on the part of the machine. In other words, they see that the computer does not duplicate the working of the human mind in language/information processing.

Melby, for one, points out overtly that MT lacks understanding of human language: In his words, "Computers do not really think about what they are doing. They just mechanically pick a translation for each word of the source text... without understanding what they are translating and without considering the context." (http://www.ttt.org) It can be seen that, besides a lack of understanding of human language, Melby identifies a lack of consideration for context as one of the reasons for the inadequacy of MT.

Meanwhile, to Haverkort in Thelen and Lewandowska-Tomaszczyk (eds) (1990:28), the lack of understanding of human language is such a crucial defect in MT that "one might even have to ask whether what the computer does can actually be called translation". In his view, the lack of understanding of human language in present-day MT systems stems from the fact that these systems concentrate on the formal structure of sentences and translate sentences or even smaller lexical units like phrases and words. This, he says, is unlike HT where human translators abstract from the formal structure of sentences and explicate the contents of the sentences. In Haverkort's perception, this focus on the content rather than on

the structure is possibly the 'understanding' that is so crucial in translation.

MT is understandably a major challenge in the field of translation. But to Waldrop (1987:64), it is no more of a challenge than that of understanding human language in the first place. As she argues, the challenge in translation is not just a matter of (decoding and) encoding words, definitions and vocabulary, not even a matter of finding some universal interlingua; instead, it has much to do with what is behind the surface structure of human language. As she puts it,

Behind the surface structure of human language lays an enormous body of shared ³knowledge about the world, an acute sensitivity to nuance and context, an insight into human goals and beliefs. (op.cit:64)

In essence, Waldrop's assertion is that any machine that is going to translate from one language into another would first have to understand the content of the source text and all its associated meanings. This, she adds, means the machine would somehow need to have a great deal of encyclopedic knowledge about the world beforehand.

The assertions of Haverkort and Waldrop, like those of Melby, indicate the necessity to consider context in MT. Firstly, Haverkort's point about MT not focussing on content can be construed as MT not focussing on meanings in context. Secondly, as encyclopedic knowledge about the world is part and parcel of context, Waldrop's argument that MT must have such knowledge in order to understand the source text can be taken to mean that MT must address the contexts in its translation process.

2.3 Computers and Understanding of Human Language

While Melby (1998), Haverkort (1990) and Waldrop (1987) pinpoint the lack of understanding of human language and the lack of consideration of context as sources of defects in MT, Schank and Childers (1984:14) go a step further and give some pessimistic views about the computer's capacity in relation to

human language understanding. They claim that there is no way we can expect software of programming language such as BASIC, Fortran or COBOL to understand human language. Their basis for such a claim is that computer programming languages allow only one way to say things -- with a specific syntax, a very limited vocabulary and with no allowance for ambiguity in meanings.

Moreover, according to Schank and Childers, the goal in getting a computer to understand human language cannot be to get it to understand distinctly human phenomena or ideas such as 'love', 'virtue', 'democracy', 'justice', 'beauty' and so on. Their argument is that even humans differ in their understanding of these abstract human concepts. On the whole, they assert that the representation of abstract ideas and concrete events is the province of human language alone.

Schank and Childers' views on the incapability of programming languages and the computer as a whole are seen here as beyond the domains of this study. However, their view relating to distinctly human phenomena and concepts is seen to coincide with an issue in this study. For this study, distinctly human

phenomena and concepts are recognized to be highly complex. This is because they encompass numerous socio-cultural and/or psychological connotations and implications. To deal with these concepts and phenomena, together with their connotations and implications, clearly requires much knowledge about and from the human world. With regard to translation particularly, these connotations and implications must be addressed, for they constitute an essential part of meaning. The translation of human concepts and phenomena is therefore a challenge for MT. To what extent is MT able to meet this challenge? To what extent can MT duplicate HT? The next few sections of literature review coupled with the analysis of data are believed to shed some light for the answers to these questions.

2.4 Understanding/Interpretation of Human Language and Inferencing

So far, what have been highlighted in this literature review are the indispensability of 'understanding' in dealing with human language (and in translation particularly) as well as the

interrelation of such understanding with knowledge, context and meaning. One other phenomenon that is interrelated with understanding and knowledge, and therefore with context and meaning is 'inferencing'.

From the ensuing paragraphs that feature the respective views of Laffling (1990), Mey and Talbot (1989), Grundy (1995) as well as Sperber and Wilson (1986) on inferencing, it can be seen that inferencing is deemed essential for understanding of human language. Specifically, according to Laffling as well as Mey and Talbot, knowledge is like a bridge between inferencing and understanding. Grundy, on the other hand, highlights the interrelation between inferencing and meaning: inferencing is a means to arrive at the implicit/indirect meanings and thereby the understanding of the utterances. Last but not least, Sperber and Wilson emphasize the role of context in inferencing and hence in the interpretation of utterances.

As pointed out by Laffling in Thelen and Lewandowska-Tomaszczyk (eds) (1990:338-339), artificial intelligence researchers advocate that the understanding of texts necessitates the human or machine understanders to find the

connections between sentences; and as these connections are only implicit, inferencing is necessary. Defining 'inferencing' as "the process of finding information above and beyond the meanings of the constituent words, of filling in the missing link between (and even within) the utterances", Laffling points out that it is the belief of artificial intelligence researchers that inferencing essentially requires knowledge about the world.

•

In reviewing Sperber and Wilson's 'relevance', Mey and Talbot in Kasher (ed) (1989: 244) also highlight the inferencing process, and especially its dependency on encyclopedic knowledge. As they point out, in 'relevance', the inferencing process is made possible by encyclopedic knowledge. Encyclopedic knowledge, in this connection, appears in 'chunk' in the cognitive environment of individuals; they are not at all pre-arranged in a system to be accessed by these language users.

While, as pointed out by Laffling, artificial intelligence researchers believe that the connection between sentences is only implicit, Grundy's (1995:4-8) observation and assertions support that belief. According to Grundy, his observations

show that even the most apparently straight-forward cases of language use are indirect and subtle; and the literal meaning is sometimes very far removed from the indirect meaning. Grundy therefore concludes that indirectness is too typical of realworld language use; and the literal or stated meaning is only one aspect of the meaning conveyed in the utterance. In order to get from the literal meaning to the indirect meaning, Grundy asserts that the understander must draw inferences. As implied in his assertion, to draw inferences is to come to conclusions based on our best guesses as to what the speaker intends to convey.

Reiterating the validity of inferencing, Grundy asserts that inferencing sometimes improves a message that is ill-informed or in some way inadequate. Also, sometimes there seems to be not much point in what people say until an inference is drawn. Relating inferencing to communication, Grundy asserts the following:

communication is not merely a matter of a speaker encoding a thought in language and sending it as spoken message through space, or as a written

message on paper, to a [hearer] who decodes it... the [hearer] must not only decode what is received but also draw an inference as to what is conveyed beyond what is said. (op.cit:8)

The above assertion of Grundy can be seen as somewhat a summary of Sperber and Wilson's (1986) claim with regard to verbal communication. As pointed out in Section 1.2.3 of Chapter 1, Sperber and Wilson claim that verbal communication involves both coded and inferential mechanisms; and within that context, inferencing plays a crucial role in explicating not only the propositional content (explicit meaning) but also the 4implications/implicatures (implicit meaning). However, instead of emphasizing the connectivity between sentences, that is, the textual links, they stress that the meanings of the 5propositions must be processed in the wider context where the utterances are made.

As Sperber and Wilson argue in Smith (ed) (1982), understanding an utterance involves recovering the proposition it expresses and drawing certain inferences based on this proposition as premise. As they put it: "The difficulty lies in

explaining ... how the intended content and intended implications are recovered: that is, how comprehension is achieved." (op.cit:61) Obviously, Sperber and Wilson's point is that comprehension requires recovering the explicit meaning as well as the intended implicit meaning of the utterance concerned.

In line with the above assertion, in a discussion entitled "Relevance and Understanding" in Brown, Malmkjaer, Pollitt and Williams (eds) (1994:38-41), Wilson (the co-author of Sperber and Wilson's **Relevance Theory**) explains that understanding an utterance involves answering three main questions, namely (a) what did the speaker intend to say; (b) what did the speaker intend to imply; (c) what was the speaker's intended attitude to the propositions expressed and implied?

In addition, Wilson asserts that 'context' or background assumptions play a crucial role in getting the answers to the above questions, and hence in the understanding of utterances. In fact, according to Sperber and Wilson, understanding is a function of the context.

2.5 Understanding/Interpretation of Utterance and Context -

In claiming that context plays a crucial role in the interpretation/understanding of utterances, Wilson however stresses that context should not be given a too simplistic definition. She points out that context is not simply the preceding linguistic text, or the environment in which the utterance takes place: it is the set of assumptions brought to bear in arriving at the intended interpretation. These assumptions, they explain, may be drawn not only from the preceding or surrounding text, from observations of the speaker and the immediate physical (spatial-temporal) environment, but also from the socio-cultural environment, scientific knowledge, common-sense assumptions, and any shared or idiosyncratic information that is accessible to the hearer at the time.

According to Wilson, while context is recognized to be essential to understanding in most writings on communication, the problem of how the intended context is identified is not seriously addressed in these writings. She argues that it is inadequate to assume that, in normal circumstances, only a

single set of contextual assumptions could possibly have been intended. Instead, she stresses that in utterance interpretation, there is a genuine and serious problem of context selection; and the hearer needs to choose the actual, ⁶intended interpretation from a vast array of possible interpretations. Wilson's claim, in other words, is that in communication, the context is not given but is to be chosen.

Sperber and Wilson's approach to context in utterance interpretation, as explained by Wilson, has been reviewed by Ariel in Kasher (ed) (1989:63-65). As Ariel concludes, this approach does not assume that, when communicating, a unique context is 'given' (by the speaker), as is commonly presumed in conventional pragmatic analyses; instead, this approach assumes that the specific context must be actively searched for (by the hearer) in the understanding of utterances. In Ariel's words. "processing procedures employed in utterance comprehension are not carried out against a fixed. predetermined set of assumptions. Instead ... a procedure for context search must be conducted simultaneously with the comprehension process." To Ariel, this view of context in relation to the comprehension process is one of the important

contributions of Sperber and Wilson's (1986) Relevance Theory.

2.6 Understanding / Interpretation of Utterance, Context and Relevance

According to Ariel (op.cit:63), the view that context should be taken into consideration when accounting for the full-range of human language phenomena is by now non-controversial; it is so in that "all pragmatic research has assumed that". However, she argues that most pragmatists have accounted for "formfunction correlations which simply happen to be due to contextual factors". What she means is that these pragmatists suggest local principles that tie grammatical forms (such as indexicals, cleft sentences, definite descriptions, existential sentences, etc) to specific contextual factors in order to account for their distribution. On the contrary, she points out that Grice (1975) and Sperber and Wilson (1986) have assigned a more general function to context.

However, context plays a comparatively greater role in Sperber and Wilson's framework than in the Gricean model of communication. As Ariel explains, while Grice views context as the basis to generate additional, implicit messages, Sperber and Wilson view the role of context as indispensable to, rather than as an additional/optional part of utterance interpretation. To Grice, the literal meaning of the utterance combines with the context to uncover the implicit meaning. This means that context is only influential in the interpretation of non-literal meaning. On the other hand, to Sperber and Wilson, context is crucial not only to the interpretation of non-literal meaning but also to the interpretation of literal meaning or the 'propositional content'.

As Ariel implies, in any discussion on the role of context in utterance interpretation, it is more important to highlight the interaction between context and information in the generation of 'contextual implications', for contextual implications are essential in the establishment of 'relevance'. As she explains:

... it is essential that utterances be evaluated against some context for the establishment of

relevance ... Having specifically contextual implications is a necessary condition [Sperber and Wilson] imposed on utterance relevance. Totally new information, unable to link up with any background context in order to generate contextual implications, is never considered relevant. (Kasher 1989: 64)

To summarize in simple terms the literature review so far on the interrelation between understanding, utterance interpretation, meaning, context and 'relevance', it is perhaps appropriate to quote Grundy's assertion (1995:12-13). According to Grundy, contexts and meanings are closely integrated; as such, an interest in meanings of utterances would implicate an interest in the contexts where utterances occur. As he puts it in relation to pragmatics, "because pragmatists are interested in the meanings of utterances, they are also interested in the contexts in which utterances occur..." Also, in succinctly relating understanding, meaning and 'relevance', he says understanding requires the mind to choose the most relevant among the possible meanings; 'relevance' is important

to such understanding because it accounts for the mechanism by which humans choose the most relevant meanings.

2.7 Meaning and Communication: Semantics vs Pragmatics

Based on Sperber and Wilson's framework of **Relevance Theory**, Blakemore (1992: 5-6) reasserts that communication has not only social and emotional dimensions, but also a psychological dimension. In addition, she stresses that communication should not be construed simply as the transmission of information -- at least not if 'information' is taken to mean the representation of facts.

'If not information, what does a speaker communicate?' To this question, Blakemore implies that the traditional answer is inadequate: The traditional answer claims that speakers communicate meanings without accounting for what exactly a meaning is. Nevertheless, according to Blakemore, there is really no generally accepted answer as to what a meaning is. Blakemore's approach to meaning then is to distinguish

between what the speaker means and what her words mean. This is equivalent to distinguishing between utterance meaning (i.e. speaker's meaning) and sentence meaning.

In distinguishing between utterance meaning and sentence meaning, Blakemore highlights that what the hearer is interested in is the speaker's intended meaning, but the speaker's words can easily mean something different from the intended meaning. Therefore according to Blakemore. knowledge of the speaker's words (sentence meaning) only provides a clue to the speaker's meaning (utterance meaning); the hearer must construct the utterance meaning from this clue with his knowledge of the context. In other words, the hearer utilizes linguistic knowledge to arrive at the sentence meaning; to procure the utterance meaning, on the other hand, he would also need to utilize non-linguistic knowledge. In essence, it can be said that the hearer depends on the integration of both linguistic knowledge and non-linguistic knowledge to arrive at the utterance meaning. A clearer explication of utterances and interpretation of utterances could be found in the following assertion of Blakemore:

... utterances have linguistic properties and nonlinguistic properties. Since an utterance consists of a certain sentence or phrase with a certain syntactic structure and [is] made up of words with certain meanings, its interpretation will depend on the hearer's linguistic knowledge. However, since it is produced by a particular speaker on a particular occasion and the hearer's task is to discover what that speaker meant on that occasion, its interpretation will also depend on the nonlinguistic knowledge that [the hearer] brings to bear. (1992:39)

In making the above distinction between utterance meaning and sentence meaning, Blakemore (1992: 39) brings up the difference between pragmatics and semantics as maintained in Sperber and Wilson's **Relevance Theory**. As she argues based on Sperber and Wilson's point, what underlies the distinction between pragmatics and semantics is the distinction between the hearer's knowledge of the world (non-linguistic knowledge) and his knowledge of the language (linguistic knowledge). Blakemore's stress on the difference between pragmatics and semantics -- in the context of the distinction between utterance meaning and sentence meaning -- can somewhat be seen to be drawing two parallels: i) parallel between utterance meaning and pragmatic meaning; ii) parallel between sentence meaning and semantic meaning. At least, it can be deduced that interpretation of utterance meaning and pragmatic meaning necessitates non-linguistic knowledge, while that of sentence meaning and semantic meaning requires only linguistic knowledge.

Much earlier, Lyons (1981:28-30) also distinguishes pragmatics from semantics in terms of the distinction drawn between utterance meaning and sentence meaning. According to him, there are generally two distinctions between these two categories of meanings: Firstly, utterance meaning is contextdependent but sentence meaning, to a high degree, is not so. Secondly, utterance meaning is not grammar-dependent, but sentence meaning is. Sentence meaning, Lyons asserts, is intrinsically connected to the 'characteristic use' of the whole class of sentences to which the sentence belongs by virtue of its grammatical structure.

One significant assertion of Lyons is that utterance meaning is crucially dependent-on context; and that even sentence-sized utterances are interpreted on the basis of a good deal of contextual information. Like Blakemore, he points out that utterance meaning goes beyond what is actually said, that is, beyond the sentence meaning. Context, he asserts, is highly relevant to the part of the meaning (beyond the sentence) that is implied (or presupposed) or implicit.

2.8 Meaning and Translation

The literature review so far indicates that meaning is an essential part of communication. Translation as a form of communication undoubtedly sees meaning in the same light. In fact, meaning is almost always emphasized in any literature on translation. More importantly, preservation of meaning is commonly recognized as the main objective of translation. This perspective is perceived in this study as only too logical because, as discernible from the earlier literature review, meanings actually constitute the building blocks of all utterances.

House (1981:25-30), for one asserts that the essence of translation lies in the preservation of meaning across two different languages. However, according to her, there are basically three aspects to meaning in translation, namely the semantic aspect, pragmatic aspect and textual aspect.

The semantic aspect of meaning, as House explains, consists of the relationship between linguistic units or symbols and their referents in some possible world (where 'possible world' refers to any world that the human mind is capable of constructing). This implies that an utterance could be semantically meaningful even if its terms have no referents in the real world. The pragmatic aspect of meaning, on the other hand, refers to the particular use of an utterance on a specific occasion, that is, the illocutionary force of the utterance. As House specifically points out, the illocutionary force of an utterance is to be differentiated from its propositional content or semantic information.

In differentiating between pragmatic meaning and semantic meaning, House highlights the distinction between semantics and pragmatics as follows:

Semantics studies the relationships between signs and designata whereby the elements of sentences which are theoretical constructs are construed into propositions. Pragmatics is the study of the purposes for which sentences are used, of the real world conditions under which a sentence may be appropriately used as an utterance. (op.cit:26)

Essentially, House refers to pragmatics as the study of discourse, that is, "the communicative use of sentences in the performing of social actions" as she quotes it (op.cit:27). Meanwhile, translation is conceived by her as concerning language in use (i.e. parole) and acts of speech. By way of making connection between these two definitions of House, it is not difficult to conceive her claim that translation is primarily a pragmatic reconstruction of the source text. On the basis of her above assertions, House argues that pragmatic meaning is of great importance in translation; and that translators should always aim at equivalence of pragmatic meaning, even at the expense of semantic equivalence, if necessary. With reference to the parallels drawn between utterance meaning and pragmatic meaning as well as between sentence meaning and semantic meaning, House's argument could be construed as follows: Utterance meaning should be given priority over sentence meaning in translation. After all, as argued by House, "translation operates not with sentences but with utterances, i.e., units of discourse characterized by their use-value in communication." (op.cit: 28)

With regard to the textual aspect of meaning, House asserts that despite its often being neglected, textual meaning is important and must be taken into account in translation. In the first place, she claims that translation is a textual phenomenon, where a text is a linkage of sentences into a larger unit, a cohesive whole. Textual meaning, according to her, is accounted for in different ways through various relations of co-textual reference

such as occurrence of pro-forms, substitutions, co-references, ellipses and anaphora.

The importance of the textual aspect of meaning in translation is summed up by House when she says: "Many of the most crucial problems [of translation] lie in attaining connectivity between successive sentences while conveying the message." (op.cit:29)

2.9 Interpretation, Intended Meaning and Translation

As pointed out by Hatim and Mason (1990:91-92), it is now widely acknowledged that comprehension of an utterance does not consist in merely decoding the linguistic form of the utterance -- but in the interpretation of the speaker's meaning, where the hearer infers what the speaker means by interpreting the utterance in a relevant context. According to Hatim and Mason, this view (i.e. Gricean view) has some implications for the translator. They say that the translator, not being the intended hearer, is, in most cases, merely an observer of the text-world environment of the source text; however, being still a hearer, the translator's role is to construct a model of the intended meaning of the source text speaker and to form judgements about the probable impact of the source text on the intended hearers. On the other hand, as the speaker of the translated text, the translator, operating in a different socio-cultural environment, seeks to reproduce her interpretation of the 'speaker meaning' (of the source text) in such a way as to achieve the intended effects on the translated text hearers.

Hatim and Mason essentially attribute a great deal of importance to the roles of the speaker and hearer in translation. They identify two principles in this regard: firstly, there is a need to consider speaker meaning and hearer meaning; secondly, it is more accurate to treat hearer meaning as being an interpretation of writer meaning. In addition, Hatim and Mason assert that pragmatic values of utterances are not attached to linguistic forms but accrue from the intentions of the speaker within the social setting of the text.

Helmreich and Farwell (1998), in motivating a pragmaticsbased approach to MT, assert that translators must interpret utterances. Their assumption is that "language is vague and texts radically underspecify the interpretation". (Machine <u>Translation</u> 13 1998:34) In addition, they assert that, from the standpoint of a pragmatics-based approach, linguistic texts or expressions do not on its own point to any referents; they only serve as vehicles for the speaker to guide the hearer to pick out or establish the intended referents. As such, a more precise account of Helmreich and Farwell's claim is that not only do translators have to interpret utterances, but they have to interpret them against a context of beliefs about the world and about the components of the discourse context.

In essence, Helmreich and Farwell argue that translation (and therefore MT) is based on interpretation rather than on the propositional content expressed by the text. In their definition, 'interpretation' is "inferred coherent understanding of the author's intent". 'Propositional content', on the other hand, is "propositions that are derived from compositionally combining the most likely senses of the lexical items in the text according

to the syntactico-semantic rules of the source language". Generally, the interpretation of the explicit meaning of the source text, can be seen as involving a number of factors. Heimreich and Farwell explain:

... an interpretation of a source text would include additional facts or hypotheses that help to relate the propositional content of a text to the surrounding text, to the immediate surrounding extra-textual context, to the intended purpose of the text and to the general information that is presumed to be shared between the author of the source-language text and the intended audience. (op.cit:18)

The above assertion of Helmreich and Farwell on interpretation in translation could be associated with the assumptions of Callow in Thelen and Lewandowska-Tomaszczyk (eds) (1990: 359) concerning what she terms 'non-realized information'. Callow's first assumption is that language, as the vehicle of communication, is used with economy: speakers frequently omit information which their hearers can readily obtain from

the context or from shared background knowledge. The second assumption is that, while the phenomenon of language being used with economy poses no problem in normal communication, the situation is very different in crosslanguage transfer: different languages display remarkable diversity in how they exercise economy in communication. In other words, what one language must include might be omitted by another language.

On the above basis, Callow (op.cit) asserts that if a source text omits certain elements of meaning according to the source language's own accepted patterns, whereas the target language's pattern of information-realization is different, the target language hearers will need some effort in terms of comprehension. This being the phenomenon, Callow suggests that a translator should provide an overt translation of information that is not realized in the source language surface structure. This, she claims, is necessary if at least the information concerned is part of the source text speaker's intended meaning. On the whole, Callow claims that a good translation is one that reproduces the meaning intended by the original speaker, in the natural form of the target language.

2.10 Equivalence and Translation

As pointed out by Komissarov (Meta XXXII, 4 1987), the translator's aim, as a rule, is to produce the closest possible equivalence of the source text meaning in the target language. However, as we have seen, there is a problem in defining what that meaning is, as well as in dealing with the complexities of text semantics. In fact, the problem of equivalence has been traditionally regarded as pivotal in the theory and practice of translation.

Komissarov maintains that the problem of translation equivalence must be addressed by first identifying the meaningful components that make up the global contents of the text. This in turn would require, among other things, a clear concept of the relative importance of the cognitive information conveyed in the text and its ⁷semantic structure. As Komissarov defines it, the speaker, with the intention of communicating cognitive information utilizes semantic principles for the said purpose: she selects the appropriate language units and arranges them in speech sequences (text) in order that the semantic units of the text informs the hearer of the cognitive

content. To this definition, Komissarov adds that semantics serves as the vehicle-for the cognitive content; it is the transfer of the latter that is the purpose of verbal communication. [semantic and cognitive contents are referred to as 'the semantic' and 'the cognitive' respectively by Komissarov] With reference to translation specifically, s/he points out that it is the cognitive that should be reproduced in the translated text.

However, Komissarov argues that the transfer of the cognitive is a fairly complicated matter: what is conveyed by the text includes a number of meaningful components which interwork with the cognitive environments of the speaker/hearer. This phenomenon is identified on four levels, namely:

- The cognitive information that the speaker intended to communicate.
- 2. The semantic content -- produced by the combination of the meaningful language units which make up the text -which is, more or less correlated, if not identical to the speaker's communicative intention.
- The specific contextual content that results from the projection of the semantic content against the background

information and the specific features of the particular speech act.

4. The received content that is the part of the contextual content accessible to the particular hearer, under the specific circumstances of information retrieval, and that becomes part of the hearer's cognitive environment.

With the above as the backdrop, Komissarov points out that the modern concept of translation equivalence is greatly influenced by the following understanding of the communicative process: The aim of communication is best achieved if the cognitive information extracted from the text by the hearer coincides with the speaker's intention. Also, the two cognitive elements from the speaker and the hearer -- that is, the cognitive information intended by the speaker and the contextual content that becomes part of the hearer's cognitive environment -- are of major importance. Last but not least, the specific contextual content of the text is of great significance, for it is where the hearer looks for and uncovers the information addressed to him. On the whole, Komissarov points out that most present-day speculations about translation suggest the aim of translation to be communicating cognitive information from the source text speaker to the translated text hearer. This, as discernible from Komissarov's assertion, is to be achieved through equivalent translation, whereby the cognitive of the source text speaker is reproduced.

At this juncture, it is not difficult to draw parallels between Komissarov's points and those of Sperber and Wilson in Relevance Theory. In the first place, Komissarov's suggestion that the purpose of verbal communication is the transfer of cognitive content is comparable to Relevance Theory's claim that verbal communication is a cognitive phenomenon, except that in Relevance Theory cognitive content is claimed to never get transferred from one mind to another.

Secondly, a parallel could be drawn between Komissarov's argument and Relevance Theory in terms of their similar emphasis on the role of the cognitive environments of the speaker and hearer. While Komissarov highlights that cognitive environments of the speaker and hearer interwork with multiple

levels of meaningful components during the verbal communication process, Sperber and Wilson claim that verbal communication takes place in the mutual cognitive environment of the speaker and hearer. What these two parties say can be seen as two sides of the same coin. Simply put, what underlies their claims is the notion that verbal communication, being essentially a cognitive phenomenon, necessitates a highly complicated cognitive 'intermediary' in and between the minds of the speaker and the hearer to take effect.

Thirdly, Komissarov can be seen to be in agreement with Sperber and Wilson in the following sense: both advocate that while the speaker communicates her intentions, the hearer's role is to uncover that intentional information. In other words, both Komissarov and Sperber and Wilson highlight the roles of the speaker and hearer in the communication process.

Fourthly, both Komissarov and Sperber and Wilson underscore the indispensable role of 'context' in uncovering the speaker's meaning.

2.11 Linguistic Theories and Translation

As pointed out by Beaugrande (1980), the fundamental assumption of mainstream linguistic theory is that our 'thought', apart from its expression in words, is only a "shapeless and indistinct mass". As further implied by Beaugrande, while this assumption is a claim by Saussure (1966), also within mainstream linguistic theory is a claim by Hjelmslev (1961) regarding 'meaning': according to Hjelmslev, meaning is an "amorphous thought-mass" that is "in itself inaccessible to knowledge" because it "can be known only through some formation" and "has no scientific existence apart from it."

The above assumptions, as Beaugrande sees it, constitute an implication that translation is "at best incapable of methodical control and at worst impossible". As he further points out, Noam Chomsky (1965) also argues along the same line. According to Chomsky, there is "little reason to suppose that reasonable procedures of translation are in general possible". Also, to Chomsky, such procedures "must not involve extra-

linguistic information" and "must be guaranteed by the sufficiency of substantive universals".

Based on the above, Beaugrande asserts that, in the main, linguistic theory gives a problematic basis for accounts of translation. The central aspects of the translation process, s/he argues, are by no means the same as the aspects of language foregrounded by the priorities of conventional linguistics. On the whole, according to Beaugrande, the main obstacle for designing linguistic theories of translation has been the lasting uncertainty about how to deal with 'meaning' or 'semantics' apart from linguistic form. Equally important, Beaugrande asserts that in accounting for translation, it is a must to inquire about the cognitive processes that operate on the content, rather than merely describing the content as "a shapeless and indistinct mass" (Saussure) or as an "amorphous thought-mass" that is "inaccessible to knowledge" (Hjelmslev).

In relating translation to linguistics, Baker (1990), however, provides a more open perspective of the issue. According to her, although the history of translation goes back a very long way, translation is a relatively young discipline in academic

terms. As such, its development and method formation need the facilitation of other related disciplines. Linguistic, she points out, is one such directly related discipline whose findings can be usefully applied to translation. Nevertheless, as she further points out, linguistics, particularly modern linguistics, includes a vast number of sub-disciplines. These sub-disciplines, as she characterizes it, cover "every aspect of semantic and formal patterning in language, as well as the interface between language and society, language and the mind, language and computers, etc". Therefore, Baker concludes the following: Any attempt to apply the findings of linguistics to the process of translation, in a practical and economic way must be selective.

¹ In this dissertation, 'understanding' is used interchangeably with 'comprehension'. The perception involved is that when one comprehends spoken or written language, one understands what is meant. Meanwhile, language comprehension is the process involved in understanding spoken and written language.

² In this dissertation, 'human language' is sometimes referred to as 'natural language' in order that it is distinguisable from 'machine language'.

³ In this dissertation, 'knowledge' is recognized as a form of 'information'.

⁴ As derived from Sperber and Wilson's explanations, 'implicatures' are additional assumptions and conclusions which are implicitly conveyed in the utterances. In other words, they are the implications of the explicit content of an utterance.

⁵ A proposition is the basic meaning which a sentence expresses.

⁶ In Relevance Theory, intended interpretation' means the intended combination of explicit context, contextual assumptions and implications, as well as the speaker's intended attitude to these.

⁷ As defined by Komissarov (<u>Meta</u> XXXII, 4 1987), semantic structure is the result of the interworking of the meaningful language units.