

Indirect Speech Acts and Metaphor

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Abstract Indirect Speech Acts and Metaphor

This paper explores the relationship between indirect speech acts and metaphor, and the systematicity of human conceptual systems as revealed in different types of English metaphorical expressions. Indirect speech acts and metaphor are similar in that they incorporate pragmatic contexts for their illocutionary implications and metaphorical entailments, respectively. Metaphorical concepts structure not only our language but our thoughts and actions.

In the process of creating metaphors, certain abstract aspects of reality are perceived through the concrete intermediary of vertical or horizontal spatial dimensions. Other aspects of reality are more preferentially captured by ontological and epistemic correspondences between them and their concrete and discernible entities.

This paper is concerned with orientational and ontological metaphors in relation to human values such as happiness, status, quality and quantity; with verbalization of ideas such as arguments, and emotions such as anger. A close study of metaphor has revealed the creative use of language that operates across disciplines and cultures, and the systematicity of our human conceptual system.

INTRODUCTION

The English language is filled with metaphorical expressions in everyday speech, and these conventional expressions reveal the way the speakers perceive reality and their conceptual system.

Ever since Aristotle's *Poetics* and *Rhetoric*, in which metaphor is defined as an implicit comparison based on the principle of analogy, metaphor has been studied by various disciplines, such as literature, linguistics, psychology, anthropology and philosophy, to mention but a few. Some linguists have been primarily interested in the relationship between the extralinguistic pragmatic features of language and the intralinguistic semantic features of language. Richard Boyd (1979:356-408) states that for scientists metaphors are sometimes essential to the statement of novel scientific theories, since metaphors fulfill the role of establishing links between the language of science and the world they purport to describe and explain. Thomas S. Kuhn (1979:409-419) makes a similar statement in "Metaphor and Science."

Anthropologists consider that metaphors and metonymies provide a grid by which they observe the informants' views on subjects such as marriages, rituals, political discourse, cosmology, folktales and proverbs. They have observed how figurative language functions in the formation and expression of a specific cultural heritage and how metaphor is used in social contexts, as illustrated in *The Social Use of Metaphor* (Sapir and Crocker 1977).

In the field of anthropology, spontaneous speech-patterns are often perceived to reveal the way people operate and live. The American linguists B. L. Whorf and Edward Sapir showed the close relationship between the way people talk and the way they live. B. L. Whorf was a linguist who first suggested that human experiences are conditioned by the language people speak. For example, both the amount of vocabulary a language

devotes to a given concept and the way its speakers dissect reality reflect, to a significant extent, its culture and constitute the lens through which the outside world is perceived.

Terence Hawkes (1972:60) maintains that the use of language involves 'getting at' one kind of reality 'through' another; the process is fundamentally one of 'transference,' and language itself is a metalanguage. In this respect metaphors are not to be considered a privileged or exclusive property of poets or creative writers but are very much rooted in ordinary use.

The purpose of this paper is fourfold: first, to examine the relationship between indirect speech acts and metaphor; second, to survey the linguistic analyses of metaphor developed up to the present; third, to explore new applications of metaphor by expanding examples and analysis based on Lakoff's orientational and ontological metaphors; and fourth, to argue that the English language contains deeply embedded metaphorical structures.

This paper consists of six Chapters. Chapter 1 concerns INDIRECT SPEECH ACTS AND METAPHOR. Chapter 2 deals with THE LINGUISTIC ANALYSIS OF METAPHOR. Chapter 3 and the first half of Chapter 4 discuss ORIENTATIONAL METAPHORS in reference to certain human values and time. The latter half of Chapter 4 and Chapters 5 and 6 examine ONTOLOGICAL METAPHORS in reference to ideas, argumentation, computers and emotion.

Chapter 1 deals with INDIRECT SPEECH ACTS AND METAPHOR. In Section 1.1, Austin and Searle's conditions are used to distinguish speech acts from locutionary acts. In Section 1.2, indirect speech acts are differentiated from direct speech acts by the presence of performative verbs. Direct speech acts are signalled by respective grammatical moods, whereas indirect speech acts are not overtly marked by them. Since linguistic utterances of indirect speech acts are interpreted in relation to their pragmatic contexts, Section 1.3 is devoted to these linguistic utterances and their speech contexts. In Section 1.4 conversational implicature is differentiated from logical implicature. As discussed in Section 1.5, for a successful com-

munication, the speaker is expected to observe Grice's Cooperative Principle which consists of four Maxims. Since metaphor is a special type of indirect speech act, Section 1.5 attempts to find relationships between Grice's Cooperative Principle and metaphor, and examines how the intended meaning is conveyed by conversational implicatures. Section 1.6 explores Gordon and Lakoff's conversational postulates which are based on Austin and Searle, and points out similarities between indirect acts and metaphorical entailments. Section 1.7 discusses how Searle's four conditions can express the conveyed meaning. Thus, Chapter 1 argues for the relationship between indirect speech acts and metaphor ; both accomplish informative, expressive and persuasive functions.

Chapter 2 deals with THE LINGUISTIC ANALYSIS OF METAPHOR. One kind of linguistic analysis deals with Leech's notional classification of metaphor as illustrated in Section 2.1. Another kind of analysis concerns the interpretation of metaphor as pointed out in Section 2.2, and Section 2.3 discusses similarities between metaphor and metonymy. The various analyses of metaphor made by Searle, Leech, Reddy and Lakoff are presented in Sections 2.4 through 2.7. These analyses serve as a device for the understanding of metaphorical entailments.

Chapter 3 concerns ORIENTATIONAL METAPHORS first discussed by G. Lakoff et al. The English language is deeply metaphorical, and certain lexical items incorporate spatial meanings as part of their meanings. Section 3.1 studies vertical spatial metaphors and examines how orientational metaphors are structured in terms of some human values such as Happiness and Sadness in 3.1.1 ; Health and Sickness in 3.1.2 ; Control and Being Controlled in 3.1.3 ; More and Less in 3.1.4 ; High Status and Low Status in 3.1.5 ; and Virtue and Depravity in 3.1.6. Section 3.2 deals with orientational metaphors in science and linguistics and shows how scientists and linguists discuss opposing approaches in terms of orientational metaphors.

Chapter 4 is devoted to the concepts of time and metaphorical expression in reference to a mathematically, psychologically and culturally-defined time. Certain aspects of time such as temporal relations with the past, present, and the future are expressed by orientational metaphors as illus-

trated in Section 4.1, whereas another aspect of time, namely, a valuable limited resource, is described by ontological metaphors as shown in Section 4.2.

Chapter 5 deals with ontological metaphors constructed in reference to ideas, arguments and computers. Section 5.1 focuses on ideas and illustrates how they are likened to people who can impart life, or to plants which bear fruit, or to objects that can sell. Section 5.2 treats argumentation as a verbal battle in which issues are to be challenged and fought with strategies. Section 5.3 explores new areas of computer metaphors which will surely increase in the future.

Chapter 6 examines how metaphors are used in reference to emotions, especially anger. Section 6.1 treats the ANGER IS FIRE Metaphor. Another physiological aspect of anger concerns heat, and Section 6.2 examines the ANGER IS HEAT Metaphor. The third aspect of anger concerns a body in which anger boils, and the intensity of anger ; as shown in Section 6.3 the body is likened to a container and intensity of anger is compared to the amount of fluid. In Section 6.4 the dangerous and destructive aspect of anger is likened to a dangerous animal. Finally, Section 6.5 highlights the aspect of the sudden burst of anger as shown in the ANGER IS STORM Metaphor. Throughout this paper, all examples that are undocumented are my own.

CHAPTER 1. INDIRECT SPEECH ACTS AND METAPHOR

Indirect speech acts have the following characteristics : (1) What is said is different from what is meant. (2) Indirect speech acts violate at least one Maxim of the Cooperative Principle. (3) As soon as hearers have identified an indirect speech act, they look for the intended meaning with the help of the knowledge of the context. (4) The speaker's utterances carry illocutionary force by which certain actions are performed. Metaphors can be viewed as a special type of indirect speech act for the following reasons. (1) Like indirect speech acts, the secondary meaning of a metaphor differs from its literal meaning. (2) Like indirect speech acts, taken literally, metaphors

violate at least one Maxim of the Cooperative Principle. (3) Metaphors need the context and the knowledge of the world for their interpretations. (4) Metaphors have persuasive functions that are analogous to illocutionary force. In metaphorical interpretation, the speaker leads the hearer to perceive novel or surprising resemblances between two entities, and evokes certain responses. The force of metaphor makes people see one thing as another and makes a literal statement convey an "extended" meaning.

1.1 Speech Acts

In *How to Do Things with Words*, delivered as The William James Lectures in 1955, J. L. Austin originated the term 'speech act' in the context of the systematic theory of utterances as human action, and distinguished three types of acts, namely, the locutionary act, the illocutionary act and the perlocutionary act. *The locutionary act* is the act of uttering words, such as sentences with a certain sense and reference. *The illocutionary act* is the act performed in uttering words, such as informing, ordering, warning and undertaking. *The perlocutionary act* is the act producing an effect by uttering words, such as convincing, persuading, deterring and misleading (Austin 1962 : 109). The illocutionary act is distinguished from the perlocutionary act ; for example, '*In saying it I was warning him,*' is distinguished from '*By saying it I convinced him, or prevented him from doing it.*'

The term *felicity conditions* was also introduced by Austin (1962 : 14-15) in reference to the distinction between constatives which can be either felicitous (happy) or infelicitous (unhappy). Performatives must meet certain conditions if they are to succeed or be 'felicitous.' Austin called these conditions 'felicity conditions.'

John Searle formalized Austin's felicity conditions for performing various illocutionary acts in *Speech Acts* (1969). These conditions, if satisfied, would make the utterance 'happy' ; the intended act would be performed. To illustrate how felicity conditions work, let us take the illocutionary acts of a request, an offer and an accusation.

In order to count as a request, the speaker must sincerely desire that the act be performed in the future, and the speaker must believe that the

hearer is able to perform the act. The essential condition of a request is that the utterance must count as an attempt to get the hearer to perform an act.

In the case of an offer, the act in question must be beneficial to the hearer and the situation must be such that the hearer does not think that the action will be performed unless the speaker offers. The act has to be in the future and the speaker must have the ability to perform it. The essential condition of an offer is that the utterance must benefit the hearer.

In the case of an accusation, the speaker believes that some act already performed is bad and that the hearer is responsible for the act. The essential condition for an accusation is that the utterance count as a claim that the hearer is responsible.

1.2 Direct and Indirect Speech Acts

If the felicity conditions of individual acts are satisfied, the utterance counts as a performance of the act in question. According to Austin (1962), the most transparent signal of an illocutionary force concerns the use of *performative verbs* such as *order*, *request*, *promise*, *offer*, *thank*, *accuse*, *pledge*, *urge*, *baptize*, and *apologize*. If these verbs are used in the present tense with the first person *I*, and the object *you* as in "I order you to do that job," for example, the utterance counts as an actual performance of giving a command, if the felicity conditions are also satisfied. Generally, the grammatical mood indicates illocutionary force as in "Do that job!" This is a direct speech act since the sentence is overtly marked by the grammatical mood of an imperative. The sentence "I order you to do that job," is in the declarative mood, but the performative verb *order* conveys the illocutionary force. If different illocutionary forces are conveyed without being marked by respective grammatical moods they are called indirect speech acts.

Thus the four grammatical moods in declarative, interrogative, imperative and exclamatory sentences do not necessarily convey their intended force. The illocutionary force of a request, for example, can be made not only by the imperative mood but by other moods as long as felicity conditions and speech contexts permit this interpretation. Requests can be made

by the imperative sentence as in "Come home before ten," or by the performative verb *request* as in "I request you to come home by ten." It may be conveyed by the peremptory declarative sentence "This door closes at 10 : 00 PM." Requests can also be made by asking questions such as "Can/ Could you come home before ten?" A newly married wife may say to her husband who is always late in coming home, "Our baby needs his Daddy," meaning "Please come home early." In this case the sentence contains an implied request. Sometimes the interrogative mood may explicitly contain the act which is requested as in "Have you mailed the letter yet?" as a request for mailing the letter.

Similarly, questions which are requests for information can be made by substituting the declarative for the interrogative mood. For example, "You know a lot about it," may imply a request for information "Can you tell me more about it?"

1.3 Linguistic Utterances and Context

Linguistic utterances are interpreted in contexts in which the speaker and the hearer share the knowledge of situation, and this knowledge is used for the interpretation of the utterance. If the literal meaning is considered inappropriate, the hearer will proceed to the next step of interpreting the utterance in terms of a conveyed or indirect meaning. If the speaker says, "Why don't you get in touch with me?", he may be making an offer ("I could help you if you got in touch with me."), or a suggestion or a hint ("It would be a good idea if you could get in touch with me."), or a WH-question for information ("Is there any reason why you cannot get in touch with me?"), or a request ("I want you to get in touch with me."), or an accusation ("I blame you for not getting in touch with me."). If the speaker says, "I'll be there," the hearer may interpret the utterance as a promise, an offer or an apology depending on the context. Similarly, if a host says to a guest, "Can you play the piano?," he may be asking for information or asking the guest to play the piano. If a friend says, "Can you come tomorrow?," the utterance may be a simple question or a warm invitation. Thus in indirect speech acts, when the addressee rejects a literal meaning, he

seeks a conveyed meaning based on the context, the speaker's tone of voice, and his shared knowledge with the speaker.

1.4 Logical Implicature vs. Conversational Implicature

Direct speech acts and indirect speech acts are connected with each other by the presence or absence of conversational implicatures ; conversational implicatures are mandatory for indirect speech acts for their appropriate interpretations, but they may be absent from direct speech acts. It is also necessary to distinguish between conversational implications and logical implications. Certain utterances logically imply other utterances if their truth guarantees the truth of these other utterances. That is, if A is true, and B is true, and if A and B are related in a certain way, then C is true. For example, if A is "All public events require an admission fee," and B is "The art exhibition is a public event," then C is "The art exhibition requires an admission fee." One characteristic of logical implication is that it is neither culturally dependent or situationally dependent. The implication holds wherever individuals agree on the conversational meanings of logical terms such as *if-then*. The same cannot be said for conversational implicatures. The following sections will deal with Grice's conversational implicature, and with the conversational postulates of Gordon and Lakoff which constitute the bases of indirect speech acts.

1.5 Grice's Cooperative Principle and Conversational Implicature and Metaphor

Conversational implicature depends on how the utterance is expected to behave with respect to conversational maxims ; it may vary situationally and cross-culturally. H. Paul Grice (1975 : 45-49) who has provided a framework for a theory of utterance in context, suggests that participants in a conversation are expected to observe the Cooperative Principle which consists of four Maxims : Maxims of Quantity, Quality, Relation and Manner. The Maxim of Quantity refers to the quantity of information to be provided, and is governed by two specific sub-maxims, namely, (1) make the contribution as informative as is required, and (2) do not make the contribu-

tion more informative than is required. The Maxim of Quality concerns the truthfulness of the content, and it is governed by two specific sub-maxims, namely, (1) do not say what you believe to be false and (2) do not say things for which you lack adequate evidence. If it were not for this Maxim of Quality, the speaker might provide information that intentionally confuses or deceives as part of the informative exchange, without violating the Maxim, "Be informative." The Maxim of Relation concerns relevance, whereas the Maxim of Manner concerns clarity. Under Manner come four specific sub-maxims: (1) avoid obscurity, (2) avoid ambiguity, (3) be brief and (4) be orderly. Interlocutors thus are expected to meet the informational need of their interactional partner(s) with truthfulness, relevance and clarity.

The connection between Grice's Cooperative Principle and his conversational implicature (1975 : 45) is explained in the cases where a participant quietly violates a Maxim, or opts out from either the Cooperative Principle or the Maxims, or is unable to fulfill one of the Maxims for certain reasons, or blatantly fails to observe a Maxim. In conversational implicature, a given proposition P has a given implication Q, provided that the speaker is presumed to be observing the conversational Maxims, or at least the Cooperative Principle. For example, if a speaker says to a hearer, "You are my sunshine," the Maxim of Quality characteristically shows the falsity of the statement. Since the hearer still thinks that the speaker has observed the Maxim of Relation, he infers that the literal meaning is not what the speaker is trying to convey. Therefore as the next step the hearer supposes correctly that the speaker is attributing some features of the sunshine to him or her and so is speaking figuratively.

Language is a means of describing reality, and its basic aims (which are sometimes violated intentionally) are to convey information, truthfulness, relevance and clarity. When we apply Grice's Cooperative Principle and Maxims to metaphor, four points can be observed. First, metaphors are usually brief and informative. They are informative because metaphors combine the familiar with the unfamiliar, and generally, but not always, evoke vivid graphic images which eloquently appeal to the imagination. Secondly, as in the example of "You are my sunshine," taken literally, the

utterance violates the maxim of quality. However, the apparent violation signals that the speaker has meant to convey not the literal meaning but the secondary meaning, and a listener attempts to perceive characteristics shared by "the sunshine" and "You". In this sense metaphors need to be "truthful" in that there must be discernible resemblances between some aspects of the two objects that are compared. Thirdly, metaphors must be relevant, appropriate to the context in which they are used. If they are too far-fetched or remote from human experience, metaphors might be misleading. Fourthly, metaphors need to be distinguished by clarity; they must come from familiar everyday speech.

The clarity issue in metaphor, however, is not always simple. On the one hand, metaphor is meant to be clear since it is used for the sake of making information more vivid. On the other hand, many metaphors are open-ended and inexplicit. As Boyd (1979 : 356-408) mentions, the use of metaphor in science is intended to provide a way to introduce terminology for phenomenological features of the world which seem probable but are yet to be more fully understood.

1.6 Gordon and Lakoff's Conversational Postulates and Metaphor

In everyday speech we frequently say one thing and mean something else. According to Gordon and Lakoff (1971), indirect speech acts are performed by utterances which include as their propositions an intrinsic felicity condition of the act being indirectly conveyed. Gordon and Lakoff apply Austin and Searle's notion to indirect speech acts and state that the indirect speech acts are performed 'happily' if the felicity conditions are met. Their conversational postulates provide a mechanism for performing indirect illocutionary acts, and the mechanism of their "sincerity conditions" involves the use of Austin's felicity rules of the Gamma 1 (T. 1) type and also Searle's use of the function indicating device. Austin's (T. 1) type states that a person participating in and so invoking the procedure must in fact have the requisite feelings, thoughts and intentions (Austin 1962 : 39-40). Searle's function indicating device deals with the illocutionary act the speaker is performing in the utterance of the sentence. Function indicat-

ing devices in English include word order, stress, intonation contour, punctuation, the mood of the verb, and performative verbs (Searle 1965 : 142). The speech act can be conveyed indirectly by asserting an intrinsic condition related to the speaker or by questioning one related to the hearer. For example, by asserting a speaker-based sincerity condition, one can convey a request as in "I want you to replace me." Similarly, by questioning a hearer-based condition, one can convey a request as in "Can you replace me?," or "Would you be willing to replace me?," or "Will you replace me?."

Conversational postulates, then, are statements which specify the way in which a sentence with a certain logical structure (that determines its literal meaning) can entail a derived meaning. The logical structure of "Can you do X?" specifies its literal meaning as a question about the ability of the addressee to perform the X act. The conversational postulate ASK (a, b, CAN (b FUT (DO (b, x)))) --REQUEST (a, b, FUT (DO (b, X))) derives a second meaning out of the literal meaning. Thus the utterance of "Can you do X?" "conveys the illocutionary force of a request by the conversational postulate just stated. Similarly, in metaphor when a literal meaning is found inappropriate, a derived meaning is sought. Another similarity is that in both cases, conversational postulates and metaphors always include an appeal to context. The context must be such that it is clear that the literal meaning of the sentence is not intended so that the conversational postulates or metaphorical interpretation can take effect.

1.7 Searle's Indirect speech Acts and Metaphor

Searle (1979 : 93) makes a distinction between the sentence meaning and the speaker's utterance meaning, and states that metaphorical meaning is always related to the latter. Sentence meaning is the literal meaning of a sentence, and the speaker's utterance meaning is the metaphorical interpretation. The metaphorical interpretation is related to Searle's theory of indirect speech acts in which 'what is said' is understood in terms of 'what is meant.'

In order to construct mechanisms whereby a literal meaning can be related to a conveyed meaning, Searle (1965 : 146-151, 1975 : 65) sets

the following conditions : (1) As a *preparatory condition*, the speaker questions or asserts the hearer's ability to perform an action as in "Could you be a little quieter?" or "You can go now." (2) As a *sincerity condition*, the speaker states his wish. His wish is that the hearer will perform an action as in "I would appreciate it if you could do this for me." Compared to a preparatory condition, the sincerity condition is asymmetrical since it cannot be questioned. A person does not normally question his desire as in "*Do I want you to reimburse me?" unless it is a rhetorical question. (3) As a *propositional content condition*, the speaker either questions or states the predication of an action of the hearer, as in "Seniors will henceforth write their theses as a partial fulfillment of the requirements for their B. A. degree," or "Won't you stop making that noise?" (4) As an *essential condition*, the speaker questions the hearer's desire or willingness to perform an act. A desire is the primary reason for performing an act, but this desire of the hearer can only be questioned not asserted, and therefore it is asymmetrical. It is possible, in requesting, to say "Would it be preferable for you to come late?" but not "*You would mind not making so much noise." Another way of satisfying an essential condition is to give reasons for performing an action. This can be done either by stating or questioning whether there are good reasons for performing an action, as in "For your own health you should stop drinking so much," or "Why don't you try it again? You might succeed."

Very interesting similarities emerge when we compare functions of metaphorical processes and speech acts. As discussed earlier, the function of a speech act is to perform an act by saying something. Similarly, some metaphors can accomplish informative, expressive, declarative, directive and persuasive functions. Metaphors sometimes add information over and above their logical meaning. They may express the speaker's feelings vis-a-vis the subject of the discussion, declare his intentions or give directions in varying degrees. Some metaphors may have a persuasive function ; the speaker may be trying to get another person to perform a certain action. In *The Social use of Metaphor*, James W. Fernandez (1977 : 104) calls metaphors which have these functions "performative metaphors", since

these metaphors lead to actions.

CHAPTER 2. THE LINGUISTIC ANALYSIS OF METAPHOR

Chapter 2 presents a survey of different linguistic analyses of metaphor. It starts with Leech's classification, clarifies certain issues concerning the interpretation of metaphor and metonymy, and discusses the various analyses made by Searle, Leech, Reddy and Lakoff.

2.1 Some Classes of Metaphor

Leech gives four notional classes of metaphor : the concreative metaphor, the animistic metaphor, the humanizing (anthropomorphic) metaphor and the synaesthetic metaphor (Leech 1969 : 158). Concrete examples of these four classes will be taken from Shakespeare.

The first two classes of metaphor are illustrated in the following :

Hamlet : The air *bites shrewdly* ; it is very cold.

Horatio : It is a nipping and *eager* air. (*Hamlet* I. iv. 1-2)

Hamlet and Horatio exchange the above statements outdoors at midnight. These statements contain an *animistic metaphor* which attributes animate characteristics to the inanimate as in "The air *bites*," and *humanizing metaphors* which attribute characteristics of humanity to what is not human as in "The air *bites shrewdly*," and "It is a nipping and *eager* air."

When Polonius is talking to King Claudius, he refers to Ophelia as follows :

Which done, she took *the fruits of my advice* ;

(*Hamlet* II. ii. 145)

When Hamlet is preparing for the play within the play, he gives the following advice to the player :

Be not too tame neither, but *let your own*
discretion be your tutor. (*Hamlet* III. ii. 16-17)

These examples illustrate *concretive metaphors* which attribute concreteness or physical existence to an abstraction as in "the *fruit* of my advice," and "let your own discretion be your *tutor*."

Observe the following use of the color black in *Othello* when Othello is infuriated with jealousy and plans to take revenge on his chaste wife Desdemona :

Look here, Iago ;
All my fond love thus do I blow to heaven.
'Tis gone.
Arise, *black vengeance*, from thy hollow hell! (*Othello* III. iii. 444-447)

This quotation contains a *synaesthetic metaphor* which replaces the literal sensory meaning with a connotational meaning. These four classes of metaphors are by no means exhaustive, but illustrative.

2.2 Interpretation of Metaphor

In the interpretation of metaphors, a process similar to that of indirect speech acts takes place ; if a literal meaning is not suitable for a speech context, a metaphorical interpretation is sought as the next step. There have been different linguistic theories of metaphor : the substitution theory, the comparison theory and the interaction theory, to mention but a few, and in each case attempts have been made to account for the relationship between the surface literal meaning and the metaphorical meaning. The main question is : "How do we establish the link between the two?" Let us discuss the various linguistic analyses of metaphor by reviewing some research done in recent years.

2.3 Metaphor and Metonymy

Lakoff and Johnson discuss the difference between metaphor and

metonymy as follows :

Metaphor is principally a way of conceiving of one thing in terms of another, and its primary function is understanding. Metonymy, on the other hand, has primarily a referential function, that is, it allows us to use one entity to *stand for* another. (Lakoff and Johnson 1980 : 36)

In metaphor and metonymy there are primary (A) and secondary (B) objects and a bundle of shared features. In metaphor, B (which is generally an abstract idea) is understood in terms of A (which is generally a concrete thing). On the other hand in metonymy, A stands for B in terms of the relationship such as 'the part for the whole' as in "We need *good heads* in our staff" (=intelligent people), "She is a *new face*" (=a debutante) ; 'a producer for a product' as in "She bought a Macintosh" (=a computer) ; and 'the place for the institution' as in "The White House has made a statement" (=the seat of government). Thus metonymy suggests a complete entity.

In both metaphor and metonymy, systematic correspondences between the primary and secondary objects are grounded in physiological bases or culture-specific experiences. Metaphors and metonymies often structure the way we perceive reality and the way we act and behave.

2.4 Searle's Analysis

First, consider some examples of metaphor from Searle :

- 1) Sally is a block of ice.
- 2) I am in a black mood.
- 3) Mary is sweet. (Searle 1979 : 117)

In these metaphorical utterances a speaker says "S is P" but means metaphorically that "S is R." How is it possible for the speaker to say "S is P" but metaphorically mean "S is R" when P plainly does not mean R, and how is it possible for a hearer to interpret "S is P" as "S is R"? Searle says that "the utterance of P calls to mind the meaning and, hence, truth condi-

tions associated with R, in the special ways that metaphorical utterances have of calling other things to mind." (1979 : 113) Thus, in the process of metaphorical interpretation, similarity plays a major role and it is both restricted and systematic. The metaphor is restricted in the sense that only certain aspects of entities are selected as a basis of comparison. Metaphor is considered systematic because it needs to be communicable in virtue of a shared system of principles. What then are the principles which make the hearer comprehend the metaphorical meaning of the speaker's utterance?

According to Searle (1979 : 114), first he must have a strategy for determining whether or not he has to seek a metaphorical interpretation of the utterance. Secondly, he must have a set of strategies for computing possible values of R. Thirdly, he must have a set of strategies for restricting the range of R's and decide which R's are likely to be the ones the speaker is asserting about S. Take Searle's examples (1), (2) and (3); the hearer finds the meaning of each sentence defective, if taken literally, and starts to look for an utterance meaning. In order to find an alternative meaning, he looks for salient, well-known, and distinctive features of P, invoking his factual knowledge of P things, such as "a block of ice" being hard, cold and frozen, which will provide possible values of R. The third step is to restrict the range of possible values of R by going back to the S term and see which ones are possible properties of S. Thus the sentence "Sally is a block of ice" could mean 'Sally is unemotional.' However, if the hearer is told instead, "Sally's house is a block of ice," he would interpret it slightly differently as 'Sally's house is damp and chilly.' Similarly, "I am in a black mood" would be interpreted as 'I am angry and depressed,' but "The weather is in a black mood" would mean that it is stormy and threatening. The sentence "Mary is sweet" would be interpreted as 'Mary is gentle, kind and pleasant' but would be blocked from the interpretation that ' * Mary is edible and palatable,' because of restriction on the context. Thus, the hearer would select plausible candidates for metaphorical interpretation out of many possible values of R.

Searle (1975 : 115) notes that "the comparison view" is more concerned with the question "How do we compare the possible values of R?"

whereas, "the interaction view" is more concerned with the question, "Given a range of possible values of R, how does the relationship between the S term and the P term restrict that range?" Irrespective of that difference, Searle's contribution is to have provided "a variety of principles for computing R, given P, that is, a variety of principles according to which the utterance of P can call to mind meaning R in ways that are peculiar to metaphor." (Searle 1979 : 115-116)

Searle has also observed that some metaphorical expressions may be open-ended in that when a speaker says "S is P," it may convey a range of metaphorical meanings, resulting in "S is R1," and "S is R2" and "S is R3," and so on. In this case metaphor is similar to indirect speech acts in the sense that a speaker's utterance can be interpreted in many different ways depending on the speech context in which it is uttered.

2.5 Leech's Analysis

Leech (1969 : 139) explains figurative interpretation in terms of rules of transference of meaning, a particular mechanism which derives one meaning of a word from another. His general formula which conforms to all rules of transference is as follows :

"The figurative sense F may replace the literal sense L if F is related to L in such-and-such a way." (Leech 1969 : 139)

Leech views metaphor against the background of various mechanisms of figurative expression. In fact, metaphor is associated with a particular rule of transference, which he calls 'the Metaphoric Rule,' the formulation of which is F='Like L,' that is, the figurative meaning F is derived from the literal meaning L in having the sense 'Like L.' (Leech 1969 : 151)

First, observe the famous lines taken from Shakespeare's *Macbeth* (V. v) :

Out, out, brief candle!

Life's but a walking shadow, a poor player,

That struts and frets his hour upon the stage,
And then is heard no more. It is a tale
Told by an idiot, full of sound and fury,
Signifying nothing. (*Macbeth* V. v. 23-28)

With this metaphoric rule, "Life's but a walking shadow" is understood as 'Life is like a walking shadow,' as a first step. In Leech's terms, 'life' is the "tenor" of the metaphor, and it corresponds to the S term in Searle (1979) and to the target domain in Lakoff (1987). On the other hand, 'a walking shadow' is the image or analogue in terms of which the tenor is represented, and it is called its "vehicle." This corresponds to Searle's P term and Lakoff's source domain.

It was I. A. Richards who first introduced the terms "tenor" and "vehicle" in *The Philosophy of Rhetoric* :

A first step is to introduce two technical terms to assist us in distinguishing from one another what Dr. Johnson called the two ideas that any metaphor, at its simplest, gives us. Let me call them the *tenor* and the *vehicle*.... 'The original idea' and 'the borrowed one'; 'what is really being said or thought of' and 'what it is compared to'; 'the underlying idea' and 'the imagined nature'; 'the principal subject' and 'what it resembles'.... (Richards 1963 : 96)

Thus, according to Richards, the "tenor" is the underlying idea or the principal subject which the metaphor expresses, whereas the "vehicle" is the analogy which is used to embody or embellish the tenor. He adds that "the vehicle is not normally mere embellishment of a tenor which is otherwise unchanged by it.... vehicle and tenor in co-operation give a meaning of more varied powers than can be ascribed to either" (Richards 1963 : 100). In the examples quoted above from *Macbeth*, the tenor 'life' and the four vehicles 'a brief candle,' 'a walking shadow,' 'a poor player' and 'a tale' which are disparate and unconnected are brought together by collocations and combinations for the sake of poetic and dramatic effects. Thus the multi-faceted

aspects of life, some of which may constitute undifferentiated areas of human experience, are made more tangible and visual by concrete resemblances.

Metaphoric transference is possible only if likeness is perceived between the tenor and the vehicle. This brings us to the third notion which is called 'the ground of the comparison.' This corresponds to Searle's R values, and Lakoff's ontological and epistemic correspondences. Leech states that every metaphor is implicitly of the form :

'X is like Y in respect of Z,' where X is the tenor, Y the vehicle, and Z the ground. (Leech 1969 : 151)

Leech gives three steps for an analysis of a metaphor. Stage I concerns the identification of the parts of figurative use which occurs at a point where literal interpretation is baffled by a violation of selectional restrictions. In "Lovers bathe in gladness," for example, there is a violation of selectional restriction between the verb *bathe* and the prepositional phrase *in gladness*. Stage II concerns the construction of tenor and vehicle by postulating semantic elements that match the literal and figurative interpretations. In order to reconstruct the literal meaning, we can insert the word *water* as in "Lovers bathe in [water]," in which *bathe in water* is the vehicle. In order to make the figurative interpretation sensible, we can insert the word *feel* as in "Lovers [feel] gladness." This will eventually make the interpretation of the tenor possible because there is no selectional violation between *feel* and *gladness*. Stage III concerns the ground of the metaphor, vis-a-vis the similarity between the tenor, "Lovers *feel gladness*" and the vehicle, "Lovers *bathe in water*." The intuitive interpretation of the hearer may include the following : "As one who is totally immersed in water feels refreshed and free, so are lovers immersed in gladness."

2.6 Reddy's Analysis

Consider first, Michael Reddy's examples :

- (1) Try to get your *thoughts across better*.

- (2) None of Mary's *feelings came through to me* with any clarity.
- (3) You still haven't *given me any idea* of what you mean.

(Reddy 1979 : 286)

Sentences (1) through (3) contain expressions that are not to be taken completely at face value as metaphors ; they might be classified as "dead." Reddy accounts for these metaphorical expressions within the framework of the "conduit" metaphor. According to his assumption a person has a "repertoire" of mental and emotional material from which he draws "a repertoire member (RM)," encodes it in signals (S) and produces an utterance. For example, the speaker may put RM *into* S, and say "It is very difficult to *put this concept into words*," or he may capture RM *in* S and state, "When you have a good idea, try to *capture it immediately in words*." He may pack S *with* RM and say, "A good poet packs *his lines with rich feelings*" or he may pack RM *into* S and state, "If you cannot *pack more thought into fewer words*, you will never pass the conciseness test." (Reddy 1979 : 312)

Reddy thus reveals a metalinguistic function of language in that language has a device to talk about itself. In this sense language functions like a conduit transporting in space thoughts and feelings which the speaker 'packs into words and sentences,' transmitting them and transferring the ownership to the hearer. The hearer 'unpacks' or 'unloads' the message, 'takes it out' and finds what is 'in' it. Ideas are perceived as objects, words are containers for these objects, and communication is a transfer of these objects. His examples from everyday speech reveal the pervasiveness of the conduit metaphor in human communication.

2.7 Lakoff's Analysis

George Lakoff argues that emotions which are often thought of as being devoid conceptual elements have an extremely complex conceptual structure and has done extensive research on metaphorical expressions in the following studies : *Metaphors We Live By* (Lakoff and Johnson 1980), *Women, Fire and Dangerous Things* (Lakoff 1987), and *More Than Cool Reason* (Lakoff and Turner 1989). Kövecses (1988) in collaboration with Lakoff claims

that the conceptual structure of emotions could be studied in detail by using techniques devised by Lakoff and Johnson (1980). At first glance there seems to be no systematic coherence in the conventional expressions for abstract concepts such as ideas, emotions and social relations. However, their findings reveal that there is an underlying coherent conceptual system which is largely metaphorical and metonymical in nature.

Lakoff and Turner state that metaphor resides in thought, not just in words (1989 : 2), and explore a conceptual system that underlies metaphorical expressions of life, death and time. To cite just a few examples, life is conceived as a journey involving a traveler, a purpose and a means of travel. Death is perceived as the earthly end of life's journey, a final destination of life on this earth. Time is understood as an allotted span on earth which will eventually come to an end, or a moving object that runs or flies, or a thief who steals away youth. Based on Lakoff's analysis, the following Chapters will deal with orientational and ontological metaphors.

CHAPTER 3. ORIENTATIONAL METAPHORS

Oriental metaphors are concerned with lexical items such as prepositions, nouns, adjectives and verbs that incorporate spatial meanings as part of their denotations. Some prepositions express relations of space and time, while others express relations of instrument, cause, goal and origin. Spatial prepositions enter into a relationship with dimensional properties between themselves and other entities. According to Quirk et al. (1985 : 674-687), the dimensional orientation of the chief prepositions of space are (1) those that deal with positive position and destination exemplified by *at*, *to*, *on*, *onto*, *in* and *into* ; and (2) those that deal with negative position such as *away from*, *off*, and *out of* ; and (3) those that deal with vertical and horizontal directions such as *above*, *over*, *on top of*, *under*, *below*, *beneath*, *underneath* ; and *in front of*, *before*, *behind* and *after*, respectively. There are (4) other prepositions denoting space such as *by*, *beside*, *with*, *near* and *close to* which deal with location ; and (5) those denoting relations within space such as *between*, *among*, *amongst*, *amid* and *amidst*, to mention but a few.

This section deals with a group of prepositions that express movement with reference to directional paths, more specifically a vertical axis of *up* and *down*. These prepositions convey metaphorical meanings when they are attached to some lexical items. This section is also concerned with some nouns, verbs and adjectives which incorporate within their own meaning the meaning of vertical movement and thus convey metaphorical meanings.

3.1 Vertical Spatial Metaphors

Lakoff and Johnson (1980) deal with three types of metaphors : orientational metaphors, ontological metaphors and structural metaphors. Orientational metaphors concern vertical and horizontal spatial concepts through which we perceive abstract reality such as 'happiness and sadness,' 'consciousness and unconsciousness,' 'health and sickness,' 'control or under control,' 'more quality or less quality,' 'high status and low status,' 'good or bad,' and 'virtue and depravity'. In each of these pairs, the first item of the pair is linked with the notion UP and is usually, but not always, expressed by words such as *up*, *high*, *superior*, *lofty*, *rise*, *lift*, *top*, *peak*, *height*, and so on. On the other hand, the second item of the pair is linked with the notion DOWN and is usually, but not always, described by words such as *down*, *under*, *depress*, *fall*, *sink*, *decline*, *drop*, *low*, *inferior*, and so on.

In structural metaphors one concept is metaphorically structured in terms of another. In orientational metaphors, however, one concept is not structured in terms of another but a whole system of concepts is organized with respect to another (Lakoff and Johnson 1980 : 14). Orientational metaphors give an abstract concept a concrete spatial orientation. To illustrate this point, examples will be given in English ; their Japanese counterparts can also be found although they are not included here.

3.1.1 HAPPY is UP ; SAD is DOWN

Observe the following sets of examples, one referring to the concept HAPPY, the other referring to the concept SAD :

He is in *high* spirits.

My heart was *lifted up* with joy.
Her hopes *soared* at the news.
My spirits *rose*.
He is *high* on rock-and-roll.
She is *high-hearted*.
Brace up! (to call forth one's courage)
He is feeling *down*.
My heart *sank*.
He *fell* into *deep depression*.
She is *depressed*.
He is *crest fallen*.
She is *down-hearted*.
He is feeling *low*.

In these examples, the concepts of happiness, cheerfulness, liveliness and excitement are associated with the upward movement, whereas the concepts of sadness, depression and dismal feelings are associated with the downward movement.

3.1.2 HEALTH and LIFE are UP ; SICKNESS and DEATH are DOWN :

Observe the following sets of examples, one referring to the concepts HEALTH and LIFE, the other referring to the concepts SICKNESS and DEATH :

He is *in the peak* of health.
He is in *tip-top* shape.
He is *down* with a cold.
His health *declined*.
He *broke down*.
The patient is *sinking* rapidly.

In these examples, the concepts of healthy conditions and life are associated with the notion UP, whereas the concepts of ill-health and death are

associated with the notion DOWN.

3.1.3 HAVING CONTROL or FORCE is UP ; BEING SUBJECT to CONTROL or FORCE is DOWN

Observe the following sets of examples, one referring to the concepts of HAVING CONTROL or FORCE, the other referring to the concepts of BEING SUBJECT to CONTROL or FORCE :

He was *promoted* to president.

He is endowed with *supreme* power.

She is my *superior*.

He has a *high* command.

Beijing is *under* martial law at present.

People groan *under oppression*.

Laborers worked *under the supervision* of a soldier.

The villagers are *down-trodden*.

The concepts of control and power are associated with the notion UP, whereas the concepts of subjection, subordination and subjugation are associated with the notion DOWN. In the following examples, those who are directed are associated with the notion DOWN :

They performed *under* his baton.

Students wrote their theses *under* the direction of a mentor.

She studied violin *under Beethoven*.

3.1.4 MORE is UP ; LESS is DOWN

Consider the following sets of examples which illustrate the concepts of MORE and LESS :

Prices *went up*.

The property prices *soared*.

The government *raised* the consumption tax.

She has a *high standard* of living.

They were *low* on ammunition.

They *marked down* the price.

The population is *declining*.

Stocks and shares are *down*.

The concepts of greater amount, quantity and degree are associated with UP, whereas the concepts of lesser amount, intensity and quantity are associated with DOWN :

3.1.5 HIGH STATUS is UP; LOW STATUS is DOWN

Consider the following sets of examples which refer to HIGH STATUS and LOW STATUS :

I call on God *the Most High*,

on God who has done everything for me. (Psalm 57 : 2)

Glory to God in *the highest heaven*,

and peace to men who enjoy his favor. (Luke 2 : 14)

He *rose* to the top.

He was *raised* to the status of a professor.

She writes for a *high-toned* literary review.

His reputation is *on the up and up*.

She *came up* from obscurity to fame.

The speaker discussed *the ups and downs* of the nation.

She discussed the *downfall* of nations.

He *fell* in status.

She came *down* in the world.

He was at the *bottom* of the class then.

As illustrated in the first two examples taken from the Bible, the Israelites addressed God as *the Most High* (Sirach 42 : 18), *God Most High* (Genesis 14 : 19-20), *the Lord Most High* (Psalm 7 : 18) and *God the Most High* (Psalm 57 : 2). The orientational metaphor *in the highest* stands for the place

where God 'dwells,' as in "*Hosanna in the highest*" (Matthew 21 : 9). Other concepts of a superior quality of mind and wealth are associated with HIGH, whereas the concepts of inferiority or a lesser quality of mind and wealth are associated with DOWN. As we shall see, however, the former is not always without a pejorative connotation.

3.1.6 VIRTUE is UP; DEPRAVITY is DOWN

Observe the following examples which refer to VIRTUE or DEPRAVITY :

They have *exalted* ideas.

She is a *high-minded* person.

They *look up* to him.

He is a person of *lofty* character.

She *held her head high* in adversity.

Don't *downgrade* her.

She was *degraded*.

That is a *low* blow. (Boxing "below the belt" ; unfair, illegal)

He has a *low opinion* of himself.

Such behavior is *beneath* him.

She *fell into* adversity.

In these examples, the virtues of integrity, righteousness, courage and patience are associated with UP, whereas negative actions such as belittling, depreciating or disparaging someone are associated with DOWN. There are some exceptions, however. The phrase a *down-to-earth* woman does not necessarily convey a negative connotation. On the contrary, an *uppity* person, a *high manner*, *high looks* and a *high-and-mighty* attitude convey negative connotations of arrogance, impudence and haughtiness. For further details see Lakoff and Johnson (1980) and Horiguchi (1987).

3.2 Orientational Metaphors in Science and Linguistics

The following statement concerns orientational metaphors used in sci-

ence :

There are various ways of understanding and pursuing a top-down research theory.... Certain stages in the development of the theory are sometimes referred to as a "*top-down strategy*."... Functional analysis as typically practiced is one sort of *top-down approach*.... As a methodology for theory construction in cognitive psychology, it contrasts with the more traditional *bottom-up approach*.

(Pylyshyn 1979 : 427-428)

In this example, the *top-down approach* of cognitive science and artificial intelligence is compared to the traditional *bottom-up approach*, and the author further states that the difference between *top-down* and *bottom-up* approaches is not a question of precision so much as a question of the priority of various criteria.

In linguistics the analysis of language can be either inductive or deductive. *The inductive method* consists of four steps : (1) observation of the performance of the native speaker's language and the collection of data, (2) insight into the structure of the data, (3) formulation of a hypothesis, and (4) verification of the hypothesis by checking it against the actual data. The linguistic theory which is based on the inductive method is often referred to as the *bottom-up approach* which is practiced by the traditional structuralists. *The deductive method*, on the other hand, begins from the search for competence in the native speaker's language. As generative syntacticians claim, the method starts from the formulation of rules and the description of underlying structures and works downward to performance, the actual use of the language. The deductive method exemplified by the generative syntacticians' theory is referred to as a *top-down approach*. *The bottom-up approach* tolerates a lack of elegance in the formulation of rules, whereas the *top-down approach* tolerates incompleteness in accounting for the pragmatic aspects of language in favor of its elegant formulation of rules. Since the *bottom-up approach* starts with complex and messy data, the formulation of rules is not always simple and elegant. Moreover, the approach attempts to

cope with unexplained "residues" by relegating them into a "bag of exceptions." *The top-down approach*, on the other hand, starts with the formulation of rules, priding itself upon the elegance and simplicity of these rules. However, when these rules are checked against the actual use of language in social and pragmatic contexts, they may be unable to account for the variety of implications and metaphorical interpretations.

CHAPTER 4. ORIENTATIONAL AND ONTOLOGICAL METAPHORS OF TIME

Time can be perceived as having two aspects : a durative aspect and a segmental aspect as seen in *Ecclesiastes* (3 : 1-8) which states that there is "a season for everything, a time for every occupation under heaven," a time to be born and a time to die. Edward Hall considered that time is an element of culture which communicates as powerfully as language (Hall 1959 : 128) and distinguished between monochronic time and polychronic time. In the former, people compartmentalize time and schedule one thing at a time and become disoriented if they have to deal with too many things at once. In the latter, people are so much involved with each other that they tend to keep several operations going on at once. American culture is characteristically monochronic (Hall 1959 : 138, 1966 : 173). Through the study of how people talk about time, it is possible to discover the way they consider or structure time.

4.1 Orientational Metaphors of Time

In everyday speech people speak of time in terms of space, using prepositions like "from," "to," and "at" which are also used for space in describing moments in time, as in "He will be here from Thursday to Sunday." In the English tradition, stories typically begin by specifying the time, though vaguely, as in "once upon a time," or "a long time ago," and end by saying "They lived happily ever after." Thus stories fill in the temporal duration between origin and destination. In daily conversation English expressions referring to time generate entire worlds of geometry moving spa-

tially up and down, and forward and backwards ; one speaks about "being abreast of the times," "behind the times," and so forth.

Consider the following case :

Our sad past is *behind* us. Let's not look *back* or cry over spilt milk. Instead, let's look *forward* with enthusiasm and go *ahead* with our plans. After all, we are *heading* for the twenty-first century.

In this example, time is perceived as something linear and the future is implied by the orientational metaphors of FRONT (*ahead, head and forward*), whereas the past is implied by the orientational metaphors of BACK (*behind and back*). Edward Hall remarks that in American culture it is assumed that people should look forward and not dwell too much on the past. Their future is not very far ahead of them (Hall 1969 : 134).

Observe the next example in which the future is associated with the notion UP :

A : What's coming *up* this week ?

B : Better check the paper for *up*-coming events.

Some cultures look backward, while others look forward. Some cultures view the future as rising from below. Still others consider it a cycle in the form of a rebirth, or "the whirligig of time" as Shakespeare metaphorically puts it (*Twelfth Night*, V. i. 377).

Another interesting aspect of time is that psychological time is different from mathematically computed time. The same amount of time may be viewed as varying in duration depending on the person and the situation ; the hours may *crawl, drag, creep, lag, speed, whiz by, fly* and *shoot by*. On some occasions the hours run so fast that the individuals feel they must fight *against* time to accomplish their work. They *beat* time and get done *ahead* of time. On the other hand, sometimes the hours *drag* so slowly that people do not know how to *kill* time. English proverbs have it that "Everything has its time," and therefore "Take time when time comes, lest time steal away."

4.2 Ontological Metaphors of Time : "Time is Money"

Another type of metaphor which is different from orientational and spatial metaphors of time concerns ontological metaphors of time. The latter express the abstract idea of time in terms of concrete entities which are tangible and manageable such as a commodity or a currency.

Each culture lives in its own world of time. In a culture where time is segmented into a year, a century, a millennium, and a year into three hundred sixty-five days plus one-fourth of a day which is accounted for by inserting a leap year every four years, and a day into twenty-four hours, and an hour into sixty minutes, a minute into sixty seconds, time is considered a resource that runs slow or fast, and therefore is valuable. Even within the same frame of computed time enforced by calendars, clocks and watches, different cultures interpret the concept of time differently. The American time system is different from the time systems of Africa, India, South Asia and the Middle East. Hall states that the American thinks it is natural to quantify time and specifies how much time is required to do everything (Hall 1959 : 134). From this notion emerge ontological and epistemic correspondences between time and money. When a businessman makes a contract saying, "It will take ten months to build a new wing," the time spent will be immediately calculated in terms of money ; in less industrialized countries, time is measured very differently.

Thus instead of comparing the concrete entities themselves, we compare them in terms of how much they are worth. Marvin Minsky states the following :

We turn to using quantities when we can't compare the qualities of things. (Minsky 1988 : 284)

Time is one of the communal measure-schemes by which a social community assigns values. Time is perceived as a currency, and once it is established as such, it takes on a life of its own like that of money. Therefore time is viewed as a limited resource which people have to 'save' or 'earn' or else they 'lose' or 'waste ; ' it is a valuable commodity which they 'buy' and

'pay for.' The English language provides expressions containing the TIME IS MONEY metaphor as illustrated in the following :

Our *reserves* of time are not inexhaustible ; time is *precious* and *costly*. Benjamin Franklin is reported to have said, "Remember, that time is money" (*Advice to Young Tradesman* : 1748). In *Richard II*, the King says, "I *wasted* time, and now doth time *waste* me" (*Richard II* . V. v. 49). The *sum* of the time spent during a lifetime may amount to one hour, a thousand hours or a million hours. Time is irretrievable. It is easier to *lose* time than to *gain* time. If I don't *budget* my time well, I will *run out of* time when I *need* it desperately. Every day I *put aside* some minutes to ponder how to *use* time *profitably*. In order to accomplish my project I *collect* time here and there and *deposit* it in my 'time-saving bank' (as in Michael Ende's *Momo*). To be always a *time saver*, however, is self-defeating. Sometimes it is rewarding to *give* my time. You have *spent* a great deal of time for me and I *thank* you for your time. Now you can *rob* me of my time. You can be a *time thief* and *steal* my time now and then. But even if I *lose* time now, I can *make* it up some other time.

These examples illustrate how the English language, in fact all languages, contain deeply embedded metaphorical structures. In the above examples of the TIME IS MONEY metaphor, the tenor, the continuous term, the target is time. The vehicle, the discontinuous term, the source is originally money, but the vehicle is not overtly present. In this sense these examples are not true metaphors. The interesting point, however, is that the ground of comparison, namely, the bundle of shared features, is incorporated in the meaning of the lexical items. The verbs, adjectives and nouns that are used for money are mapped onto similar references to time. This conventionalization of metaphors is becoming more and more prevalent as shown in the examples in this paper.

CHAPTER 5. ONTOLOGICAL METAPHORS OF IDEAS, ARGUMENTS AND COMPUTERS

This section examines ontological metaphors which deal with ideas, arguments and computers. In these metaphorical expressions, ideas are perceived as people, plants and objects ; arguments are likened to a verbal battle, and mental processes are compared to a computer.

5. 1 The IDEAS ARE PEOPLE, PLANTS AND OBJECTS Metaphor

A metaphor focuses on one aspect of reality and many different metaphors capture the various dimensions of that reality. Metaphors referring to ideas as people, plants, products, commodities, resources and cutting instruments and fashions given by Lakoff and Johnson (1980 : 47-48) provide examples of this process. Ideas are conceived as people as in "Einstein conceived the theory of relativity which *gave birth* to many other theories. Some may be in their *infancy* yet." Ideas are viewed as plants as in "His idea was a *grain* of mustard which grew into a big *tree* with many *branches* and *offshoots*, bearing abundant *fruit* in the minds of many people." Ideas are products as in "He *supplies* us with excellent ideas to handle the new situation." Ideas are commodities as in "If you *package* your idea this way, it will *sell* ; people will *buy* it without arguing." "All my ideas are *used up*," and "I *run out of* ideas". Ideas are cutting instruments as in "He is known for his *razor sharp* criticism and his comments *cut to* the heart of the matter. His wife also makes *piercing remarks*." Ideas are fashions as in "Her ideas are *in vogue* right now."

5. 2 The ARGUMENT IS WAR Metaphor

Expressions used for war, duelling and archery are frequently used for arguments since arguments are perceived as verbal battles (Lakoff and Johnson 1980 : 4). The ARGUMENT IS WAR metaphor implies that issues are to be 'challenged,' 'fought' with 'strategies,' 'defended' and 'won,' as illustrated in the following :

She *shot down* all his arguments.

He becomes *offensive* and she becomes *defensive* in discussion.

He *attacked* my argument.

I was completely *beaten down* by his attack.

She *fought* single-handed but was finally *defeated* by his massive *counterattack*.

His announcement was a *bombshell*.

The conference hall was a *battlefield*.

This issue will become a *prolonged battle*.

He became more and more *belligerent*.

When their position became weak, they *packed up* and *retreated*.

In these examples, war vocabulary is used to describe arguments. Similarly, expressions pertaining to archery, duelling and boxing are also used for verbal battles as in the following :

Her questions are *right on target*.

I was overwhelmed by her *arrow sharp* arguments.

This question is *far off the mark*.

She *challenged* him in the speech contest.

He *was cornered* and *lost ground*.

She mercilessly *attacked* her opponent's weaknesses.

The proclamation gave us a *death-blow*.

Thus, in a heated argument, we are intent on *attacking* our opponent's position and *defending* our own, so as not to *lose* but to *gain ground* and to *win* the verbal battle.

5.3 Computer Metaphors

Our technological world is filled with computers on which computer scientists write programs, feed in data, correlate, select and have the program executed to get the output, to mention but a few operations they per-

form. Programming is likened to a builder constructing a well-defined hierarchy of structures using specialized agents and agencies, giving commands, executing them, and breaking them down to frames of small origins and destinations ; errors during the execution of programs are described as bugging and debugging.

When the speaker says, "She is a human computer," the hearer may see the analogy between computation and human thought and interpret it as "She calculates astronomically fast," or he may focus on its mechanical aspect and interpret it as "She thinks like a computer," or on its application power and interpret it as "She knows how to make use of computational ideas," or on its future possibilities and interpret it as "She is a fast and original thinker." Thus ordinary people interpret the metaphor in terms of what they think a computer can do. It is not uncommon today for people to make use of computer concepts and describe mental processes, as in the expressions "She is *programmed* to think that way," "These children need linguistic *input*," and "Without positive and negative *feedback*, it might be hard to relate what we said to what others heard."

For specialists, however, metaphors have another function. Boyd (1979 : 369) states that the metaphorical expressions of computer terminology are descriptive of fundamental features of human cognition, and allow for clarification and illustrate their programmatic character. In saying, for example, that "The human brain is a computer," and that "Thought is information processing," theory constitutive metaphors suggest similarities between human cognition and machine computation that have been discovered and are still to be discovered. The use of metaphor certainly changes the perception of the world. Terry Winograd and Fernando Flores (1986 : 8) remark that "in examining how people have thought about and talked about computers, we become aware of the pervasive effect of a powerful tradition that emphasizes 'information,' 'representation,' and 'decision making.'"

Zenon Pylyshyn makes the observation that if a cognitive model is empirically adequate, there is no need to qualify one's interpretation by taking refuge in a metaphor (Pylyshyn 1984 : xiv). The difference between describing a system literally and describing it metaphorically has a pro-

found effect on the way science is practiced. The literal acceptance of a system indicates that certain observations are possible, whereas the metaphorical expression suggests possibilities that might exist, and therefore the latter becomes a new way of perceiving reality, having a more persuasive effect than an indirect speech act.

In a computer-rich world, Papert (1980 : 98) comments that computer languages offer new and powerful descriptive languages for thinking which will undoubtedly be carried into the general culture. The following illustrates his point :

Our aim is to divide the program into natural parts so that we can *debug* programs for each part separately.... By working with small parts, however, *bugs* can be confined and more easily *trapped*, figured out.... The worst conditions for *debugging* are created when several *bugs* are present simultaneously. The *debugging* process is especially effective if the modules are small enough for it to be unlikely that any one contains more than one *bug*. (Papert 1980 : 102, 12)

In computer language we talk about errors in the program as if they were insects that are bothering us. As we trap bugs and see what they are and how they have entered the room, we detect errors and analyze what has happened, what has gone wrong, and this analytical knowledge is beneficial for future operations. Papert discusses debugging as a powerful learning device. Children learn to transfer habits of exploration from their personal lives to the formal domain of scientific theory construction instead of erasing the whole program and always starting from scratch (1980 : 113, 117). A series of experiments has led to Papert's Principle which Marvin Minsky formulates as follows :

Papert's Principle : Some of the most crucial steps in mental growth are based not simply on acquiring new skills, but on acquiring new administrative ways to use what one already knows. (Minsky 1988 : 102)

As these examples illustrate, metaphors in cognitive psychology are taken from both the terminology of computer science and the information theory.

Recently, the news media talk about computer hackers developing defective programs as "programs infected with viruses." The virus destroys data stored in a disk and damages components of the computer itself. In order to prevent the spread of computer virus programs, a group of computer specialists will introduce "a vaccine," an antiviral software package. (cf. *The Japan Times*. Thursday, May 3, 1990.)

CHAPTER 6. ONTOLOGICAL METAPHORS OF ANGER

All emotions have physiological correlates. For example, when a person gets angry, the body automatically reacts ; the pulse increases, the blood pressure becomes elevated, respirations quicken, the heart pumps faster, the stomach contracts, muscles tighten, adrenal glands secrete and changes occur from head to toe. Metaphors of anger express these physiological changes in various ways.

6.1 The ANGER IS FIRE Metaphor

Fire burns, producing heat and light, consuming and destroying what it devours. It suddenly flares up into flames, blazing with a spectacular outburst. So do our emotions. It is often the case that the eruption of anger, wrath, rage and fury is metaphorically conceived as a fire, or as the heat of a boiling fluid.

If the emotion of anger is metaphorically perceived as fire, there must be ontological and epistemic correspondences as G. Lakoff (1987 : 387) maintains. The ontological correspondences exist between the entity in the source domain of a metaphor which is *fire* and the entity in the target domain onto which the metaphor is mapped, namely, *anger*. Lakoff's source domain corresponds to Richards' vehicle, whereas Lakoff's target domain corresponds to Richards' tenor since Lakoff and Richards focus on different aspects of the question. There are more correspondences : 'the *fuel* for fire' and 'the stimulus of anger ;' 'the *burning* fire' and 'the angry body ;' 'the

degree of *heat*' and 'the intensity of anger.'

The epistemic correspondences deal with the knowledge about the source domain and the target domain. Our experiential knowledge tells us that fire heats, burns, spreads, consumes, destroys, transforms and easily gets out of control. This knowledge about fire is mapped on to the knowledge about anger ; such carry-overs are metaphorical entailments (Lakoff 1987 : 384).

Because of these ontological and epistemic correspondences, we can say that 'He is in a *blazing* fury,' and 'I was literally burning with *rage*,' as we talk about 'a house on fire,' and 'a blazing forest.' Similarly, as 'we *quench* fire,' 'we *quench* our desire, anger and thirst.'

In *The Old Testament* the wrath of a just God is metaphorically portrayed as a fire, heat, a fluid, a storm and a dangerous animal. This wrath is another side of the love of God who passionately desires the sanctity and the fulfillment of the salvific destination of human beings. When the Israelites fall short of God's plan by turning to idol worship, the wrath of God sweeps over the nation. The examples of anger metaphors are taken from *The Old Testament*, as translated in *The Jerusalem Bible* and *The New American Bible*.

The following passage describes the anger of Yahweh :

The land is set *afame* by the *wrath* of Yahweh Sabaoth and the people are *food for the fire*. (Isaiah 9 : 16-18)

Here, the divine anger is likened to a great fire that consumes the land and the wicked.

Observe the following verses taken from the song of Moses in which the anger of God is compared to fire :

They (People who disowned God) have roused me to jealousy with what is no god,
they have angered me with their being of nothing ;
I, then, will rouse them to jealousy with what is no people,

I will anger them with an empty-headed nation.

Yes, a fire has blazed from my anger,

it will burn to the depths of Sheol ;

it will devour the earth and all its produce,

it will set fire to the foundations of the mountains.

(Deuteronomy 32 : 21-22)

Again God's anger shakes the foundation of the earth and burns until he frees his people from their enslavement to false allegiances and idol worship.

In the following verses the psalmist prays that God's burning anger will be appeased :

Yahweh, how much longer will you hide ? Forever ?

How much longer *must your anger smolder like a fire?* (Psalm 89 : 46)

Other places in *The Old Testament* in which the ANGER IS FIRE metaphor is used include (Isaiah 5 : 25), (Exodus 22 : 23, 32 : 10), (Sirach 45 : 19), (Job 19 : 11, 4 : 9, 32 : 5), (Jeremiah 17 : 4), (Deuteronomy 29 : 23, 33 : 2), (Psalm 59 : 14), and (2 Kings 22 : 17) in *The New American Bible*. In these passages, wrath is *enkindled* and *inflamed* ; it *burns*, *flames up*, *blazes up*, *consumes*, and *devastates* the wicked.

6.2 The ANGER IS HEAT Metaphor

As seen in the ANGER IS FIRE metaphor, the ANGER IS HEAT metaphor is also grounded on physiological bases in that when anger is aroused, an angry person feels hot. The examples taken from *The Old Testament* which go back approximately three thousand years are still vivid and comprehensible today because their metaphors are constructed on physiological bases. The ontological and epistemic correspondences between the source domain (fire and heat) and the target domain (anger) are universal not only in the Hebrew, Aramaic and Greek in which the original texts were written, but also in French, German, English and the many other lan-

guages of the world into which they were translated.

Observe the following example taken from *Esther* in which King Ahasuerus becomes angry because his Queen has refused to come to his banquet :

But Queen Vashti refused to come at the king's command delivered by the eunuchs. *The king was very angry at this and his rage grew hot.*
(Esther 1 : 12-13)

When his pent-up anger is released, his body heat cools down :

After this, when King Ahasuerus' *wrath had cooled*, he thought over what Vashti had done and what had been decreed against her. (Esther 2 : 1)

When his anger is released, the body returns to normal functioning.

Observe the following example from Isaiah :

Lo, the Lord shall *come in fire*,
his chariots like the whirlwind,
To wreak his wrath with burning heat
and his punishment with *fiery flames*. (Isaiah 66 : 15)

These verses contain both ANGER IS FIRE and ANGER IS HEAT metaphors.

6.3 The ANGER IS A FLUID IN A CONTAINER Metaphor

The ANGER IS A FLUID IN A CONTAINER metaphor has the entities, *a fluid* and *a container* in the source domain which correspond to *anger* and *body* in the target domain, respectively and the *amount* of fluid also corresponds to the *intensity* of anger.

The New American Bible gives the following translation of the verses in *Jeremiah* :

Therefore my wrath brims up within me,
I am weary of holding it in ;
I will pour it out upon the child in the street,
upon the young men gathered together. (Jeremiah 6 : 11)

As a hot fluid kept in a container bubbles over, the wrath of God boils over and pours upon the wicked. Here is another example :

Therefore, the Lord Yahweh says this: *My anger and my wrath shall be poured out on this place,* over man and beast, trees of the countryside, fruits of the soil ; *it shall burn,* and not be quenched. (Jeremiah 7 : 20)

Observe the following example from Isaiah :

See, I take out of your hand
the cup of stupor,
the chalice of my wrath ;
you shall drink it no longer. (Isaiah 51 : 22)

Isaiah says that people who have drunk the cup of Yahweh's wrath to the dregs will no longer drink it ; the cup of his wrath will be put into the hands of their tormentors, and he tells his own people to shake off their wickedness.

6.4 The ANGER IS A DANGEROUS ANIMAL Metaphor and Simile

Anger needs to be expressed constructively by channeling the energy into the right direction. If, however, repressed anger is unleashed in an unregulated manner, the individual may cause danger to himself and others. It is often the case that uncontrolled anger and rage stop short of inflicting physical damage ; violent temper bursts out, and this may destroy relationships in time. Because of this dangerous and destructive aspect, anger is often compared to a beast, or a dangerous animal that breathes fire and

devours a person.

The Old Testament gives the following simile in which fury is likened to a lion :

The king's wrath is like the roaring of a lion,

but his favor, like dew on the grass. (Proverbs 19 : 12)

Like the roaring of a lion the fury of a king ;

Whoever provokes his anger wrongs his own life. (Proverbs 20 : 2)

In the above passages, the lion which is the king of animals stands for the king as well as for his fury.

In the following metaphor from *Job*, God's vengeance and fury lie in wait for the wicked as a lion crouches in wait for prey :

I am the prey his wrath assails,

he gnashes his teeth against me. (Job 16 : 9)

Similarly, in the following simile, God pursues the wicked, hunting them out like a lion seeking its prey :

Therefore, I will be *like a lion to them,*

like a panther by the road I will keep watch.

I will attack them *like a bear robbed of its young,*

and tear their hearts from their breasts ;

I will devour them on the spot *like a lion,*

as though a wild beast were to rend them. (Hosea 13 : 4-8)

These examples contain similes in which two unlike entities, anger on the one hand, and a ravenous lion, a ravening panther or a furious bear on the other are explicitly compared.

Other examples of the ANGER AS A DANGEROUS ANIMAL metaphor include (Proverbs 28 : 15), (Psalm 10 : 9) and (Hosea 11 : 10, 13 : 7-8) in *The New American Bible*.

6. 5 The ANGER IS A STORM Metaphor

The ANGER IS A STORM metaphor highlights the sudden burst and intensity of anger, likening it to a storm as in the following :

See, the *storm* of the Lord !
His wrath breaks forth
In a whirling storm
that bursts upon the heads of the wicked.

(Jeremiah 23 : 19 ; 30 : 23)

Jeremiah continues to say that anger of the Lord shall not abate until he fulfills what he has determined in his heart.

Yahweh's anger sweeps the earth and people try to find shelter from the violent storm as they avoid a tempest by going inside the house. Yahweh speaks :

Go into your rooms, my people,
shut your doors behind you.
Hide yourselves a little while
until the wrath has passed. (Isaiah 26 : 20)

and he continues :

I am angry no longer.
...
Or *if they would shelter under my protection,*
let them make their peace with me,
let them make their peace with me. (Isaiah 27 : 4-5)

After the storm subsides, come peace and reconciliation. Other examples are in (Psalm 50 : 3 ; 55 : 9), (Sirach 43 : 17) and (Isaiah 30 : 30).

CONCLUSION

Ever since the beginning of human speech, metaphor has been a link between language and the reality of the world it purports to describe or explain. Metaphors have helped to clarify ideas and they reveal much about the conceptual system of the speech community who creates and enjoys them.

Among many metaphors, certain types of metaphor require linguistic analyses, while others require different kinds of analyses. Poetic metaphor asks for a more literary approach, whereas religious metaphors need an understanding of the Jewish, Christian, Buddhist or Islamic theological backgrounds, for example. Metaphor has a specific function in literature, science, anthropology, philosophy, linguistics, religion and the law, to mention but a few areas. For scientists, metaphors suggest areas yet to be discovered and explained ; for anthropologists the "unreflected" way people speak reveals how they think more accurately than their self-conscious and deliberate utterances. For linguists the way people interpret reality reveals the creative way people use language. For theologians, metaphors present philosophical and theological abstractions in more vivid and concrete forms.

Metaphors are similar to indirect speech acts in that they need pragmatic contexts which help interpret various meanings of metaphors ; some are clear while others are open-ended. In indirect speech acts there are systematic correspondences between uttering words and performing actions. In the case of illocutionary acts, their respective felicity conditions and speech contexts make the utterance "felicitous" or "infelicitous," successful or unsuccessful. The hearer starts from the literal meaning and ends with the implied meaning. In metaphorical interpretations, the hearer looks for an indirect meaning through metaphorical entailments, as described by Searle, Leech and Lakoff.

From one angle of analysis, metaphors may be orientational or ontological. Orientational metaphors reveal that some concepts which English speakers perceive as 'positive' are associated with the notion UP, and

'negative' concepts suggest the notion DOWN. These concepts are realized by words such as *high*, *low*, *up* and *down* as well as prefixes such as *super-* and *sub-* which incorporate vertical spatial orientations, and they are used for the metaphorical notions of, for example, "High and Low Status," "Good and Bad" and "Control or Being Controlled."

The abstract notion of time is conceived as being linear and uni-dimensional. Its temporal relations are dependent upon figurative expressions of location such as *at* and *in*. The concept of time may be realized in relation to a *forward span*, a *backward span*, an *upward span* or a *downward span*. It may be conceived as a commodity to be bought and sold ; or as money to be earned, saved and spent.

Metaphorical expressions often deal with emotions such as anger, jealousy and love which can be thought of as being unrelated to any organized conceptual system. However, a close study of metaphorical expressions of emotions has also revealed that their ontological and epistemic correspondences are cross-cultural. This fact leads to an understanding of the systematicity of our human conceptual system.

In the future, research of metaphor can be pursued in the areas where personality types are related to the images or symbols they prefer when expressing their emotions, concerns and aspirations. Personality differences may be measured by the Myers Briggs Type Indicator and the Nine Types of the Enneagram, for example. These different types of personality have their characteristic ways of perceiving reality and see in a situation what is uniquely valuable to each type. The investigation of the implications of personality types on the choice of metaphor used in the process of narrating the journey of self-discovery should prove very fruitful.

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