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THE COGNITIVE FORCE OF METAPHOR:

A THEORY OF METAPHORIC

MEANING

by

Eva Feder Kittay

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FOREWORD: A STATEMENT OF THE THEORY

In this essay I want to elaborate a theory of metaphoric meaning which will succeed in displaying the conceptual interest of metaphor. The theory I propose is within a tradition which views metaphor as a means of organizing our experience by putting together two ideas not ordinarily commingled. This theory has been put forth as an "interaction" theory by Max Black¹ and I, for reasons which will become clear, would call it, along with my own, a "perspectival" theory.

My views differ substantially from Black's and other perspectival theories insofar as I use two relatively new notions, semantic fields and connotative semiotics, to make precise the nature of the perspectival interaction. Very briefly, a semantic field is a structure consisting of signs which are related to one another by means of "sense-relations," that is, by the various types of semantic relations existing among signs and among concepts. The reader may have remarked that I speak of signs and not of words. I do so for two reasons. First, while most metaphors we think about are linguistically expressed, we also take as metaphor other signs such as visual images or ritualized actions. Moreover, I believe my theory of metaphoric meaning to be useful in accounting for the conceptual use of models (in science and other cognitive activities) which are not always linguistically expressed. While I extend my theory neither to non-verbal metaphor nor to models in this work, I should like my theory to be so generalizable.

The second reason, however, is more immediate. The view of metaphor I propound draws some of its inspiration from structuralist discussions

¹Max Black, *Models and Metaphors*, (New York, 1963), Chapter 3.

concerning "the play of signifiers," a notion I discuss in Chapter 4. This notion is based on the Saussurian conception of the sign. The Saussurian sign is a dual structure consisting of a means of expression, the signifier (*signifiant*), and a content, the signified (*signifié*). By generalizing this dual structure we can say that every sign has a plane of expression and a plane of content, each of which is in itself a system of relations. We get a play of signifiers if we use the level of expression not simply as a vehicle for some content but also as a set of relations among its elements, the signifiers.² Doing so, we can, for example, get a play of sound which sets off consequent plays of meaning in poetry.

In a metaphorical sign we can think of the dual structure of the sign to be further relativized so that on the plane of expression we have not a signifier only, that is, a mere vehicle for some content, but an entire sign with its own expression plane and its own content plane. Then we have what I call the connotative semiotic of metaphor. Let me illustrate with a brief example. The word "bees" used as a literal sign denoting the buzzing social insects which produce honey has on its plane of expression the phonetic sequence /bīyz/ in the spoken language, and has on its content plane the concept of an apian being. Shelley uses the term metaphorically to speak of the exploited workers of England in a poem entitled "Song to the Men of England." The content level of the denotative sign will not do to express the full content for which Shelley employed the term. If we consider the denotative sign to be the expression for some other content, let us say the workers, then the sign is metaphoric

²The diagram on p. 65 of Chapter 2 indicating the associative field of the French word, *enseignement*, suggests the various directions in which special play may be developed.

and has what I have called a connotative structure.

This elaboration of the sign, when combined with the notion that the two planes of the principal sign, i.e. the metaphor, are characterized by semantic fields, allows us to claim in the case of metaphor a phenomenon analogous to the play of signifiers of the Saussurian sign. Namely, in metaphor, the relations among the elements of one semantic field are used to reorder the elements of a second semantic field, or more precisely, the elements of the content plane of a second semantic field. As semantic fields reflect the conceptual structure underlying our language (and presumably our thought), metaphors can effect changes, however transient, in these conceptual systems.

The dissertation will be in two parts. Part One presents the historical background and the conceptual apparatus needed to develop the theory I have outlined above. It consists of three chapters. In the first, I review the traditional alternatives to and give the historical background of the perspectival theory. In the second chapter, I set forth what I take "meaning" to be. In this chapter the theory of semantic fields is presented and modified for its use in a theory of metaphoric meaning. In Chapter Three, I establish a necessary condition for metaphor, develop the notion of a connotative semiotic, and ask what are the pre-conditions, that is the limiting conditions, for metaphor to be generated in a language. Part Two uses the notions argued for in Part One to elaborate a new perspectival theory of metaphoric meaning. It consists of Chapters Four and Five. In Chapter Four I use the idea of metaphor as a connotative semiotic to examine the metaphoric analogue of a "play of signifiers," and to question the significance of the idea that a metaphor is a motivated

name. Finally, in the fifth chapter, I apply the theory to a number of extended metaphors, drawn from poetry and philosophy, as well as shorter analyses of other metaphors. In addition, using the principles developed in the course of this study, I distinguish metaphor from other figurative language.

Part I. Founding a New Perspectival Theory of Metaphoric Meaning

CHAPTER I

Perspectival Theories of Metaphor

It has been recognized from the beginnings of the literature on metaphor that metaphor is a displaced sign. Aristotle identified the displacement as a transference and the sign as a name. Cicero and Quintilian persisted in this view, establishing a tradition which is scarcely challenged even today. But still we want to know: why transfer the name of one thing onto another thing? Words have their meanings, names name what they name; why displace words and names from their usual designations? Most pertinent to our inquiry is whether such a displacement serves any cognitive end. Of the traditional answers given for its use, few seem to focus on the cognitive function of metaphor, although only the detractors of figurative language assign to it a purely capricious role.

In this chapter we will trace the development of one recent tradition in which the cognitive force of metaphor is recognized and in which explanations of metaphor's conceptual power have been attempted. This tradition has yielded a number of theses all of which I classify together as perspectival theories of metaphor. A perspectival theory is one in which metaphor, insofar as it has a cognitive import, is thought to be primarily a means by which we regard one thing in terms of another, such that our understanding of the first is modified in light of the perspective gained by this conceptual detour.

The perspectival theory is in contrast to the decorative and the comparison theories. The latter two approaches may be seen as emerging from the seminal work of Aristotle, especially as developed by Quintilian

and Cicero.¹ In the decorative view, metaphor is an embellishment of our language, a stylistic flourish. In the comparison thesis, it is an implicit comparison between the thing from which the name was borrowed and the thing to which the name is newly affixed. In accordance with these two views, metaphor has a number of traditionally assigned functions. These include its use for the sake of ornament, euphemism and dramatic effect; for the purpose of providing a name to some previously unnamed x; as an intellectual puzzle for intellectual delight; and as a means of remarking on a previously unrecognized similarity between two things.

In examining the views put forth by the classical writers we find, I believe, that even the decorative and comparison views are somewhat more complex and interesting than is often assumed. Of these, the furthest removed from cognitive purposes is the presumed ornamental use of metaphor; that is, that one name is borrowed from some other object because the borrowed name is more pleasing or more emphatic, or in some other way more "dressy" than the ordinary name, but that the ordinary name would, in fact, be sufficient to convey the significant information. The statement, however, that metaphor is ornamental can have two different values. On the one hand, it can imply that metaphor is mere ornament--hence dispensable, even distracting to the 'real' business of language, which is the production of meaningful statements, and more particularly true statements, since metaphors, taken literally, are false or even nonsensical. Socrates' dismissal of eloquence in the opening lines of

¹ Even the perspectival approach may be seen to be present in Aristotle's writings, as I point out later.

the "Apology" is typical of such disdain--although, of course, true to the spirit of irony, Socrates' very denial of (his) eloquence is itself a masterful piece of eloquence, demonstrating not the power of plain speaking, but of tropological, i.e. indirect language. Centuries later Bachelard writes that metaphor "seduces the reason," thereby himself using the figure, seductively, to damn it. From Socrates to Bachelard, the dangers and evils of this mere ornament are recounted as warnings to the unwary reader or listener. Other writers, on the other hand, believe metaphor to be so highly valued precisely because it is ornamental and not merely utilitarian, as is ordinary language.

Both Cicero and Quintilian had great esteem for ornament in speech, if it were fitting and appropriate to the subject at hand. That is, in order to properly understand what these classical writers meant by considering metaphor to be ornamental, we must place a valuation on "ornament" different from the trivializing one to which we are accustomed. Moreover, they, along with Aristotle, are interested in integrating the ornamental with the useful, so that the ornamental may not, in fact, form the antithesis of the intellectual, or cognitively valuable.

Cicero in a telling simile relates that metaphor was first invented out of the necessity to name an unnamed entity by borrowing the name of something resembling it:

. . . Using words in a metaphorical sense, is widely prevalent, a mode of which necessity was the parent, compelled by the sterility and narrowness of language; but afterward delight and pleasure made it frequent; for as dress was first adopted for the sake of keeping off the cold, but in the process of time began to be made an ornament of the body and an emblem of dignity, so the metaphorical use of words was originally invented on account of their paucity, but became common from the delight which it afforded.

(*De Oratore*, Book III Chap. XXXVIII, p. 236)

Cicero might have remarked that dress, no matter how elaborate it becomes, still serves the basic need for warmth as well. And while a lace handkerchief may serve only a decorative function, a coat, no matter how extravagantly embroidered, still protects against the cold. If the analogy can legitimately be carried forth, then metaphor, even in the midst of an affluent language, should continue to serve a basic need. Yet from Cicero's point of view, the remains of utility in metaphor would only tarnish the brilliance it provides. He writes, "Those have a greater degree of boldness which do not show poverty, but bring some accession of splendor to our language" (*De Oratore*, Book III, Chap. XXXVIII, p. 237). The society of metaphors is not classless, but aristocratic, mirroring the society from which this view sprang forth where what is most valued is furthest removed from utility and need (gentlemen do not work).

A somewhat different point of view is expressed by Quintilian when he attempts to unite beauty and usefulness: a pragmatics of ornamentation. The pleasure of adorned language insures the attentiveness and credulity of the audience: "The flash of the sword in itself strikes something of terror to the eye." Even more in the spirit of uniting function and beauty is Quintilian's citation of the pruned olive trees: the pruning makes the trees at once more fruitful and more beautiful. Yet in spite of his arguments for the coincidence of beauty and use, Quintilian is still moved to write in laudatory tones: "The ornate is something that goes beyond what is merely lucid and acceptable."² To those interested in the cognitive import of metaphor, such praise still

²Quintilian, *Institutio Oratoria*, Book VIII, trans. by H.E. Butler (London, 1922), p. 245.

appears to be damning. The language of cognitive import is, after all, language which is lucid and acceptable. It then appears that if metaphor has a cognitive efficacy, it cannot be sought in its qualities as ornament--no matter how highly we regard ornament.³ But is it always the case that what is cognitive must be what is lucid and acceptable? Has not the history of intellectual pursuit revealed that what is 'lucid and acceptable' is so only given a set of often ill-founded assumptions? What at first appears obscure and unacceptable sometimes more nearly approximates the truth, and sometimes forces a questioning of entrenched positions leading us to more thoughtful judgments. To view metaphor as ornament, in the prized sense, may not yet provide us with an explanation of its cognitive efficacy, but it indicates that if metaphor has such efficacy it must be

³ An interesting attempt to put forward a view of metaphor which is basically the antithesis of the above conclusion is Rosemond Tuve's study of imagery in the Elizabethan and Metaphysical poets. She attempts to show that the Renaissance poets, while adhering to the ornament view of metaphor, considered metaphor to be an indispensable means by which to treat subjects poetically. The key to this conception lies in the idea that a metaphor must be a perfect "fit" between a subject and an "image." It is as if we thought of clothing as being beautiful only if it revealed the true lines of the body. In the same way metaphor, to be truly ornamental, rendering its subject beautiful, must bear to that subject not an extrinsic but an intrinsic relation. But to properly conceive of this intrinsic relation, Tuve suggests that we think of 'style as a garment' (to the body of meaning) in the sense that "the flesh is the soul's garment, its bodying forth or manifestation" (*Elizabethan and Metaphysical Imagery*, (Chicago, 1947), p. 61). From this we might infer, if we are to understand the subject the way the poet wants us to, that he must use not the term ordinarily applied to that subject, but the appropriate metaphor--only the metaphoric term can properly convey the poet's understanding of the subject. If this be "ornament" then ornament may indeed serve a cognitive function. Our construal, however, somewhat misrepresents Tuve's argument. Her claim is not that the Renaissance poets conceived of imagery so that only by the appropriate fit of image and subject could the desired thought be expressed; it is rather that these poets conceived of the poetic enterprise itself as the construction of an artifact by appropriately fitting a subject and a form. As such metaphor is indispensable for poetry, but not necessarily indispensable for cognition.

sought in the break metaphor makes with what is "merely lucid and acceptable."

If we cannot erect a theory of the cognitive usefulness of metaphor based on its function as ornament, let us ask about that utility of which Cicero and Quintilian speak, which first gives rise to the figure which later becomes ornament. Cicero's simile reveals metaphor as a means of compensating for the paucity of language, of providing names for things which are nameless. "The leg of a chair" or the "foot of a mountain" are standard examples of the way in which we use a name borrowed from one thing to apply to another, nameless thing. But is this transference metaphor? It should perhaps more properly be called catachresis, literally a misuse of language. Catachresis is sometimes taken to refer to those cases of metaphor which arise out of a need to name some unnamed entity, though it is sometimes said to be an abuse of language. Quintilian uses the term sometimes neutrally, sometimes negatively. He writes in one place,

For metaphor should always either occupy a place already vacant, or if it fills the room of something else, should be more impressive than that which it displaces (p. 311).

But later in the same text, he writes of catachresis (which he has identified as abuse),

We must be careful to distinguish between abuse and metaphor, since the former is employed where there is no proper term available and the latter when there is another term available (p. 321).

This discrepancy can be resolved by regarding catachresis as a species of the generic term 'metaphor,' of which there is another more resplendent species which does not arise out of need. But this resolution is subverted when we read, a few lines later,

As for poets, they indulge in the abuse of words even in cases where proper terms do exist and substitute words of similar meaning.

The examples of catachresis which Quintilian gives are perhaps more

enlightening as to the relation between metaphor and catachresis:

Flasks are called *acetabula* (vinegar flasks) whatever they contain and caskets *pyxides* (made of boxwood) regardless of their material (p. 321).

These are cases where a definite and particular object or set of objects are in need of a label, and the label chosen is one which belongs to a related object or set of objects.⁴ The extension of a term in such a case seems to be more appropriately called catachretic than metaphoric.

Let us, however, consider another set of cases where such borrowing takes place. Aristotle does not speak of catachresis, although he does attribute to metaphor the function of supplying a name to something which is otherwise nameless. The example Aristotle chooses is very instructive. The casting forth of seedcorns, he says, is called sowing, but the act of the sun casting forth its flames has no special name. Thus we can metaphorically describe the latter by calling it "sowing." Many metaphors formed on the ground of analogy name something previously nameless.

This nameless act (B) however stands in just the same relation to its object sunlight (A), as sowing (D) to the seed-corn (C). Hence the expression in the poet "sowing around a god-created flame" (D+A). (1457a32)

The situation is more complex than Aristotle makes it out to be. To view B as something distinct, something to be named, is in itself more likely a result of the metaphor than a cause of the metaphor. This act

⁴ Contemporary examples in English would be calling what we do to operate a touch-tone phone "dialing," or calling a refrigerator an "icebox," or calling graphite pencils with which we write "lead pencils." The term "dialing" is particularly interesting as it is many times over an example of a catachresis. The term comes from the Latin *dies* meaning "day" and was used as an appellation for the sundial across which a passing shadow marks the passing of a day. This is a type of metonymic extension of meaning. Through a second set of transfers, it became the name of the face of the sundial, then the face of a watch and eventually denoted any circular demarcation of intervals including that of a telephone.

is nameless because it was not conceived as an act until the formulation of the perception given in (or by) the metaphor. Here there is a clear conceptual and cognitive feature of metaphor. In what we have chosen to call catachresis above, the metaphoric transfer is fairly incidental to the act of naming; that is, the unnamed object could just as well have been named by a word imported from another language in which that object is named, or labeled by a neologism. But in the case Aristotle presents, the metaphor is not dispensable insofar as it was itself instrumental in having identified a something to be named. The metaphor provides for us a way of learning something new about the world, or about how the world may be perceived and understood.⁵

But we do not use metaphors only for entities that are previously unnamed. What cognitive function is served by using a metaphorical rather than the literal name when there is such a 'proper' name? Is it an intellectual puzzle for intellectual delight? This is a fairly trivial, although amusing use, more properly called an epiphenomenon than a motive. Is it then a means of remarking on a previously unrecognized similarity? Aristotle, believing similarity to be the basis of metaphorical transference, and granting to the perception of similarity an important cognitive role, saw in metaphor a conceptual tool of much power. Aristotle's famous remark occurs in *The Rhetoric*,

But the greatest thing by far is to be a master of metaphor. It is the one thing that cannot be learnt from others; and it is also a sign of genius since a good metaphor implies an intuitive perception

⁵We shall see later that even a metaphoric extension which results in catachresis is not devoid of cognitive import insofar as it serves the very important need for a kind of conceptual economy in our language.

of the similarity of dissimilars. Through resemblance, metaphor makes things clearer. (1405a)

Aristotle speaks of the usefulness of an examination of likeness: that "by means of an induction of individuals in cases that are alike . . . we can claim to bring the universal in evidence;" that it is useful for hypothetical reasoning because "it is a general opinion that among similars what is true of one is also true of the rest." From this we can infer that insofar as metaphor is grounded in similarity, it is akin to inductive arguments and can serve in hypothetical reasoning. We get some support for this inference in a discussion in the *Rhetoric* where Aristotle is attempting to account for the pleasure afforded by metaphor. Using a previously established and presumably exhaustive classification of names, Aristotle argues that strange words puzzle us, ordinary words express ideas which simply convey what we already know, but "it is from metaphor that we can best get hold of something fresh" (1410b10). Thus the pleasure we get from metaphor is an intellectual pleasure, the root of which is the forming of a new idea gotten by transferring the name of one thing onto something similar, but not ordinarily perceived as similar. Such projection, conceived through likeness but containing an element of novelty, is akin to hypothetical reasoning based on induction.

That Aristotle attributed to metaphor such lofty cognitive powers is, given the evidence we have cited, highly conjectural. What is perhaps more firmly based is the fact that he regarded analogical reasoning as an immensely useful and important conceptual instrument. And at least one mode of transference found in metaphor is based on analogy. We also know that Aristotle most valued metaphor based on analogy. He considered

it to be a method of classification and selection in the case where things are considered alike not because they possess a common generic name, but because they bear an analogical relationship to one another. This is applicable to the various fields of inquiry: to ethics as well as to science. In the latter, for example, it allows us to classify together such anatomically related things as "a squid's pounce, a fish's spine, and an animal's bone . . . as if there were a simple osseous nature" (Aristotle, 98a20). In ethics, it allows us to produce arguments of the following sort: as sight is good in the body, so intelligence is good in the soul. Presumably those metaphors that are based on analogy partake of the intellectual virtues Aristotle affords to analogy itself. These metaphors, it should be noticed, are not based on similarity or resemblance in the same way as other metaphors are.

Aristotle has, in fact, given us two distinct grounds on which metaphor may be based: one a substantive resemblance, that is, a common feature shared by the thing which borrows the name and by the thing whose name is lent (this results in what Max Black calls the comparison view of metaphor), and the other a similarity involving analogical relations, that is a structural isomorphism between two distinct objects or classes of objects. Where a substantive resemblance is claimed as the basis for metaphor, the presumption is that this similarity is objectively given--that some feature is in fact held in common and it is only for the perceptive eye, or the perceptive mind to take in this fact. But if metaphor merely records similarity pre-existing among things, then metaphor as a figure is quite dispensable in favor of a more explicit form of comparison. Yet, as Black and others have remarked, the idea that there are pre-existing

similarities among things which metaphor records is at best naive. In criticizing the comparison theory of metaphor, Black writes that if similarities were "objectively given" so that to the question "Is A like B in respect of P?" we might give a definite answer, then :

. . . similes might be governed by rules as strict as those controlling the statements of physics . . . Often we say, "X is M" evoking some imputed connection between M and an imputed L (or rather to an indefinite system L_1, L_2, L_3 . . .) in cases where, prior to the construction of the metaphor, we would have been hard put to find any literal resemblance between M and L. It would be more illuminating in some of these cases to say that the metaphor creates the similarity than to say that it formulates some similarity antecedently existing. (*Models and Metaphor*, Chap. III, p. 37)

Virtually any literary metaphor will illustrate Black's point. Consider Wallace Stevens' metaphor of a garden as a "slum of bloom" in the poem "Banal Sojourn;" what objectively given similarity is there between a garden and a slum prior to the formation of the metaphor itself?⁶

In a rather subtle manner the claim that two entities share a structural property, a common relational property, does not entail that this isomorphism is "objectively" given. In a pre-Kantian way we can claim that objects need to be merely perceived, not constructed; relations, however, are constructs of the mind and cannot be passively taken in by

⁶ For a competent rehearsal of the comparison view of metaphor, see Geoffrey Leech, *A Linguistic Guide to English Poetry*, (London, 1969), Chap. 9, p. 150 ff. Leech uses Richards' tenor-vehicle terminology but applies it to a comparison, not an interaction, view of metaphor.

Notice that it is misleading to claim even for similes that they are the mere comparisons we have disclaimed for metaphor. Similes are often of the form "A is like B" without any "in respect of P" being put forth, either explicitly or implicitly. For example, Eliot's,

The evening was spread out against the sky
like a patient etherized upon a table.

Eliot's simile, as much as any metaphor, creates a similarity rather than records an antecedent one. Disclaiming the comparison view does not entail drawing a sharp distinction between metaphor and simile.

our perceptions. To claim that metaphors, or at least a certain group of metaphors, are based on analogy makes them potentially a source of conceptual innovation, and cognitively irreplaceable by simple comparison. However, one difficulty with relying on Aristotle for enlightenment on the cognitive usefulness of even those metaphors based on analogy is that he leaves analogy itself unexplained and unjustified. Thus questions regarding the cognitive value of metaphor get displaced onto analogy, and we are prompted to ask: If analogy is a valid form of argumentation, explanation or classification, why is it so? For example, in order to argue that intelligence is good in the soul, why transfer our thought to another realm and claim that sight is good in the body? What makes such a transfer useful and what makes such an argument legitimate? If we classify by means of analogy, what principles of organization prompt such classifications, and why do we consider them legitimate--why not classify only according to "objectively given" common features?

These questions are relevant to any procedure of transference, be it metaphor or analogy, and it is to these questions that our inquiry addresses itself. They will, I believe, best be answered by a view of metaphor quite different from that adopted by the classical writers whose views we have focused on. In a negative appraisal of metaphor, Aristotle almost hits upon it. He writes that as argumentation, metaphorical expression is always obscure⁷ because metaphor results in the same object being placed under two different genera, neither of which includes the other (139b33-140a2). If a genus is regarded as a perspective

⁷ This appraisal conflicts with what can be inferred from the statements he makes regarding analogy and metaphor based on analogy.

upon an object, metaphor results in placing an object under two perspectives simultaneously. I say that Aristotle "almost" hit upon this conception of metaphor because in his view such a characterization constituted a liability for metaphor as a cognitive apparatus, whereas the contemporary view holds this to be the locus of metaphor's cognitive potency.

This I call the perspectival theory of metaphor, although varying versions of it have been called "interaction" or "integration" or "tension" theories. There are essentially three elements common to all versions of this thesis:

- 1) In metaphor we get "two ideas for one."
- 2) One "idea" is used as a means of viewing or rethinking the other.
- 3) There is a "tension" between these two ideas: they are not easily or usually considered compatible.

The key notion, that in metaphor two concepts are operative simultaneously, was articulated long ago by Samuel Johnson who wrote, "As to metaphorical expression, that is a great excellence in style . . . for it gives you two ideas in one" (quoted in I.A. Richards, *The Philosophy of Rhetoric*, (New York, 1950), p. 93). But Johnson saw metaphor as merely ornamental and as an element of style, not of meaning. As to the relationship between these two ideas, Johnson is silent, and unless the two ideas brought together in metaphor work on each other in some significant way, metaphor is either a succinct way of speaking, since the two ideas are economically presented in a single word, or it is contrariwise an elaborate way of speaking, since an extra (extraneous?) idea is brought in where a single thought would do just as well. Only

with the romantics, and particularly with Coleridge, do we begin to get an analysis which focuses on the relationship between the various ideas expressed in a metaphor. Coleridge speaks of the imagination as:

The power by which one image or feeling is made to modify many others and by a sort of fusion to force many into one . . . combining many circumstances into one moment of thought to produce that ultimate end of human thought and human feeling, unity.⁸

It is metaphor which is the linguistic vehicle of this unity. Metaphor, or at least metaphor shaped through the imagination, does not record pre-existing similarities in things; rather it is the linguistic means by which we bring together and fuse into a unity diverse thoughts and thereby re-form our perceptions of the world. With Coleridge, we leave behind the "decorative view" of metaphor. A bit of appliqué work does nothing to alter the manner in which the garment clothes the body.

If we say that in metaphor two ideas are supported by a single term, we must ask how it is to be distinguished from ambiguity. Empson, perceiving that in both metaphor and ambiguity two or more ideas are supported by a single term, considers metaphor to be a type of ambiguity. But if the remaining conditions of a perspectival theory are to be met, then metaphor and ambiguity must be distinguished from each other. In ambiguity, the two (or more) thoughts expressed are independent of each other, each resulting from a legitimate, that is, established use of that term. In metaphor one of the two thoughts is imported, not arbitrarily, but so that the thoughts depend on and are motivated by each other. (Yet we may employ ambiguity purposefully so as to exploit its polysemy; to do this we treat the two or more meanings as if they were not independent, but reflected off each other.) In his book Empson provides us with many

⁸S. Coleridge, *Biographia Literaria*, Chpt. 2, ed. G. Sampson, (Cambridge: Cambridge University Press, 1920).

senses of the term "ambiguity," and in a footnote he gives what is the decisive feature. He writes, "There would be no point to calling something ambiguous unless it gave room for alternative reactions" (*Seven Types of Ambiguity*, (New York, 1966), p. 6).

There are at least three ways in which metaphor exhibits ambiguity. First, there is ambiguity in that a metaphorical utterance may be understood literally. The statement "I was a morsel for a king" is ambiguous because it may be metaphorical, or in the case that the king is a cannibal, it may be literal. Second, in a metaphorical utterance it is not always clear which terms are to be taken literally and which term(s) metaphorically. When a metaphor is taken out of context it is always ambiguous in this sense. E.g. "This woman is my father" may be referring to a person who is in fact a woman or to a person who is in fact a male parent.⁹ The third ambiguity is the one spoken of by Empson. Every metaphor, or at least every metaphor that has not lapsed into catachresis, is ambiguous in that it allows for an indefinite set of interpretations, that is, "alternate reactions." But this ambiguity must be carefully distinguished from the fact that metaphor supports two thoughts in one term. In the first chapter of his *Seven Types of Ambiguity*, Empson analyzes a line from a Shakespearean sonnet to illustrate in what sense he takes metaphor to be ambiguous:

To take a famous example, there is no pun, double syntax, dubiety of feeling in

"Bare ruined choirs, where late the sweet birds sang,"
but the comparison holds for many reasons; because ruined monastery choirs are places in which to sing, because they involve sitting in a row, because they are made of wood, are carved into knots and so forth, because they used to be surrounded by a sheltering building crystallized out of the likeness of a forest, and colored with stained glass and painting like flowers and leaves, because they are now abandoned by all but the grey walls colored like the skies of winter, because the cold and Narcissistic charm suggested by the choir boys suits well with

⁹ See the discussion in Chapter III, p. 120, concerning this ambiguity in metaphor.

Shakespeare's feeling for the object of the Sonnets, and for various sociological and historical reasons (the Protestant destruction of the monasteries; fear of Puritanism) . . . and there is a sort of ambiguity in not knowing which of them to hold most clearly in the mind (pp. 2-3).

What Empson is describing is a set of alternative reactions.

In order to understand how these ambiguities figure in the Shakespearean line, if we reconstruct the context from which the line comes, then we see that the "bare, ruined choirs" is in apposition to the "boughs" of the previous line for which it is a metaphor.¹⁰ Here are the two preceding lines:

When yellow leaves, or none, or few do hang
Upon those boughs which shake against the cold,
Bare, ruined choirs, where late the sweet birds sang. (Sonnet 73)

I believe that without being reductionist one can say that the two ideas supported by this metaphor include the choir benches of the image itself and the tree branches spoken of in the previous line. This duality then is distinct from the ambiguities of which Empson speaks. The latter are generated by the metaphor, the multiplicity of meanings which issue forth from the original clash of the "two ideas in one." This is not to say that the meaning of the metaphor is the tree branches, bare and empty, rather than the rich accumulation of meanings Empson puts forth; it is only that the analysis Empson gives, the ambiguity of which he speaks, would not be forth coming if it were not for a process which occurs between the two ideas which is distinct from ambiguity of any sort. When Empson speaks of the metaphor (in the line of the sonnet) as ambiguity, it is not

¹⁰ In looking at the poem as a whole, we see that the entire scene is a metaphorical rendering of the poet's state of mind. Such metaphors within metaphors are characteristic of Shakespeare. See Chapter 5.

because there is an indecision as to which of the two meanings, choirs or boughs is to be understood, but because there are possible alternate reactions to the juxtaposition of these two meanings.¹¹ If "choirs" were merely ambiguous, then we would be uncertain whether it signified choirs or boughs--the ambiguity would force us to regard one interpretation at a time, just as that, by now familiar, gestalt illustration forces us to see either a duck or a rabbit but not both simultaneously. In metaphor we do not have to choose which idea is signified.

The more we speak of these two ideas and attempt to make clear the relationship between them, the more the need for an adequate terminology becomes apparent.¹² I. A. Richards introduced two terms,

¹¹ This metaphor could be considered genuinely ambiguous as in the second sense mentioned above, since one has the choice of taking "choirs" figuratively and "birds" literally (which is presupposed above) or taking choirs literally and "birds" figuratively if we think, as it would be easy to do, of calling children singing in a choir as "sweet birds."

¹² Sanford, one of the earliest proponents of a perspectival theory of metaphor, suffers from this lack in his attempt to characterize the duality and simultaneity of metaphor in his book, *Greek Metaphor*, (Oxford, 1936). He writes:

The term metaphor is fully valid only when applied to a very definite and rather complicated concept, viz. the process and result of using a term (X) normally signifying an object or concept (A) in such a context that it must refer to another object or concept (B) which is distinct enough in characteristics from A to ensure that in the composite formed by the syntheses of concepts A and B and now symbolized in the word X, the factors A and B retain their conceptual independence even while they merge in the unity symbolized by X: this integration of diversities is true metaphor (p. 101).

This integration Sanford calls by another metaphor, "metaphor is the stereoscope of ideas," thus underlying the simultaneity of the process. But that Sanford's formulation suffers from a lack of adequate terminology is evident in the following. He writes that the unity of A and B are symbolized by X. But X presumably signifies some concept or object A; how does it come to symbolize (and why symbolize rather than signify?) the unity of A and B? Indeed this may be the central oddity in metaphor,

"tenor" and "vehicle,"¹³ to identify the 'two ideas' in a metaphor, and the term "interaction" to describe the relation between them.¹⁴ Unfortunately, Richards never gives us a clear and explicit definition of his terms; rather, he allows us to grasp the distinction through suggestion and example, defining vehicle in terms of tenor and tenor in terms of vehicle. Indeed, explicit definitions seem difficult to formulate, so we too will proceed by an example, the metaphor taken from Shakespeare's sonnet. The vehicle of "bare, ruined choirs" is simply the idea literally conveyed by this phrase, i.e. bare, ruined choirs. The tenor is the idea conveyed by the vehicle; in our example the autumnal boughs serve as the tenor. Although this distinction formulated as such is subject to important criticisms, it has been most useful in clarifying the fact that a metaphor is neither the tenor nor the vehicle but the two conjoined together.

The vehicle is more or less equivalent to what critics and rhetoricians have often called the "image." But as Richards and others have pointed out, "image" suggests that metaphor is primarily visual. This is a problematic view which has been ably criticized by Richards.¹⁵ He

¹²(cont.) - and yet in Sanford's characterization it is presumed and not explained--in part, I suggest, because he lacks a terminology for discussing the parts and process of metaphor. Moreover, the terms "synthesis" and "integration," in spite of Sanford's efforts to emphasize the conceptual independence of A and B, tend to underline their merger instead.

¹³I.A. Richards, *The Philosophy of Rhetoric*, (Oxford, 1936).

¹⁴It is perhaps apt that the most prominent interpreter of Coleridge, Richards, should make the most influential statement on metaphor in contemporary times.

¹⁵In the *Philosophy of Rhetoric*, Richards cites the contention of literary critic T.E. Hulme who writes that the language of poetry is a "visual, concrete one. It is a compromise for a language of intuition which would hand over sensations bodily. It always endeavors to arrest you, and make

writes,

Language well used, is a completion and does what the intuitions of sensation by themselves cannot do. Words are the meeting points at which regions of experience which can never combine in sensation or intuition, come together. They are the occasion and the means of that growth which is the mind's endless endeavor to order itself . . . Language is no mere signalling system (pp. 130-132).

And this, one might add, is possible only by virtue of the abstract nature of words. If words had the plenitude of things themselves, they would lack the suppleness necessary to serve as "meeting points."

The image terminology is misleading for another reason as well, for within its framework one says that a given image conveys a certain meaning, thereby conflating the tenor with the meaning of the metaphor.

Notice that now that we have the distinguishing term *tenor* it is not difficult, in the case where we have a metaphor which takes the form of a copula sentence, to put forth an argument which demonstrates the need to make the distinction between tenor and meaning. For in a copula sentence if we mistook the tenor for the meaning of the metaphor, then we should be left with a simple tautology: "man is a wolf" becomes "man is a man." Thus just as Frege began his query into the distinction between

¹⁵(cont.) - you continuously see a physical thing, to prevent you from gliding through an abstract process" (quoted in *Philosophy of Rhetoric*, p. 128). Richards responds through counter-examples--genuine poetry which is neither visual nor concrete--only one of which we reproduce here:

This she? No this is Diomed's Cressida.
If beauty have a soul, this is not she.
If souls guide vows, if vows be sanctimony
If there be rule in unity itself,
This is not she. (quoted p. 129)

Richards adds that Hulme and others are beguiled by the visual metaphor, e.g. "see" is used to speak of intellectual comprehension, and that such beguilement is possible only when we believe that language is "a compromise for a language of intuition" rather than the means by which we "complete" experience.

sense and reference by asking why "The morning star is the evening star" is not simply a tautology equivalent to "A = A," we can highlight the distinction between the meaning of a metaphor and the tenor by asking why "man is a wolf" is not equivalent to "man is a man."

This argument suggests that the confusion of tenor with meaning is parallel to the sense-reference confusion within theories of meaning of non-figurative language. To see this, consider the elements involved in the sign, "bee" and its relation to the object it denotes.

sign ¹⁶	signifier	the phonetic or orthographic representation, /bīyz/ or "bees"
	- - - - -	
	signified	the concept of a bee (the semantic representation of bee, its semantic field)
	referent	some actual bee in the world

Now consider the tenor-vehicle analysis of Richards, applied to the Shelley metaphor, "bees of England" speaking of the workers of England.

metaphor	vehicle	the idea of bees (and their social hierarchy)
	- - - - -	
	tenor	the idea of workers (and the social and economic hierarchy of which they are part)
	meaning	(one approximation) the workers of England considered as within an exploitative socio-economic hierarchy parallel to that between the worker bees and (the Queen and her) drones

The meaning of the metaphor bears the same structural relation to the metaphor as the referent of a sign bears to the sign; and the meaning of the metaphor bears the same relation to the tenor as the referent of a sign bears to the signified.

¹⁶ In Frege's terminology, the signifier is the sign and the signified is the sense.

The above diagrammatic representation should call our attention to another parallel, perhaps the most essential one. The vehicle-tenor duality is matched by the duality of signifier-signified. This duality is inherent in all signs and is essential for signification. But the representation above should also make clear that while the vehicle-tenor duality parallels that of signifier-signified, it is not coincident with it. In the later chapters we will exploit the parallel, for it is on the basis of this and the near coincidence between the two that we will construct the case for metaphor as a connotative semiotic.

The virtues, then, of the tenor-vehicle terminology have been to eliminate the misleading talk of imagery and to clarify the distinction between the components of a metaphor and the meaning of the metaphor. Thus Richards' naming of the two components of metaphor has played a role analogous to Frege's distinction between sense and reference. The net effect has been to make more evident the perspectival character of metaphor, for when metaphor is no longer an image conveying a meaning, and meaning is no longer confused with one component of the metaphor, then we begin to see that one component can be used as a way of regarding the other, thereby yielding a meaning resulting from the perspectival juxtaposing of two ideas. More precisely, we can say that if there exists a tenor, which is a conceptual content, but not the meaning of the metaphor, and if the vehicle has or is a conceptual content as well, distinct from the tenor and from the meaning of the metaphor, then every metaphor involves two conceptual contents which function as two simultaneous perspectives or categories under which some entity is viewed. That entity is usually the referent of some term for which the tenor serves as a conceptual content. Thus

the tenor picks out that which in the world is named or spoken of in the metaphor. We might say that if a metaphor can be said to have a referent, then it has a referent only in some oblique fashion. We can now deduce, from Richards' analysis, that metaphor has a referent by virtue of the tenor--the tenor is the key to the referent of the metaphor, as it provides the category or perspective under which that referent is habitually regarded. Richards himself speaks of interaction rather than 'perspective' to talk about the relation between tenor and vehicle. It is Burke who discusses metaphor as "perspectival incongruity," emphasizing in the choice of perspective the role of convention and interest.¹⁷ I have favored "perspective" rather than "interaction" because it specifies the pertinent kind of interaction.

Although many of Richards' followers do not use his terms, this does not diminish the importance of their introduction. The original terminology may serve only as a stepping stone to a more complete analysis in which its terms may be discarded in favor of more appropriate and precise ones. But what is important is the initial drawing of the distinction and its baptism, for they permit the subsequent development.

There are some important reasons for not adopting the tenor-vehicle distinction and attention to some will alert us to those features of metaphor which we would like to see reflected in our terminology. First, it is not always clear which term represents the vehicle and which the tenor. This problem is related to the inherent ambiguity in metaphor mentioned earlier, namely, that in a metaphorical utterance it is not always

¹⁷ K. Burke, "Four Master Tropes," *Kenyon Review*, 3, 1941, pp. 421-438.

clear which terms are to be understood metaphorically and which literally. Presumably it is the vehicle term which is to be understood metaphorically and the tenor which is somehow related to the terms understood literally. The problem can only be resolved contextually, but although Richards puts a great deal of stress on the importance of context, he gives us no way to talk about context in such a way that it would help to clarify how we determine the tenor and the vehicle in any given metaphor. An adequate terminology should reflect the relation of a metaphor to its context in such a way that this type of disambiguation is possible. (There may, of course, be literary works in which the author has constructed a text so that both alternative interpretations are entirely consistent and thus the metaphor cannot be disambiguated. But such artful constructions are rare. It is equally possible that an author supplies us with either an overly rich or an overly impoverished context so that disambiguation is not possible. This is often the case in poetry.)

Furthermore, it is not clear whether vehicle refers to the idea signified by the terms appearing in a metaphorical expression, or the contextual or conceptual framework of the terms used. This vacillation motivates Black, as we shall see, to drop the terminology entirely.

Richards rarely, if ever, speaks of the vehicle as the word(s) used in the metaphorical expression. Although it seems quite natural to say, in the case discussed earlier, that the word "choirs" is the vehicle, the status of the used word itself is left undecided. For all of Richard's celebration of language, the actual words used to make a metaphor are left

without an assigned role. I make this point not merely to protest that language is not given its proper due, but because the vehicle as Richards seems to conceive of it, that is as an idea which conveys the idea of the tenor, is incapable of performing its assigned function. Although one idea may stimulate the production of others, an idea is not a mode of conveyance. But insofar as we communicate, use ideas as objectifiable bits of content, these belong to a plane of content, i.e. not that which expresses, but that which is expressed by some signifying matter. An adequate terminology must then reflect the distinctions between and the relations among the term used metaphorically in the text, the idea it signifies and the contextual and conceptual framework of the term.

It is also not clear what the tenor is. Richards says that it is the principal idea which is conveyed by the vehicle. However, sometimes it seems as if this idea is conveyed by the same term which conveys the vehicle, whereas at other times it appears as if it is conveyed by terms which form the context for the vehicle. The vehicle, by its very nature as a vehicle, must be explicit in the text. The tenor, however, is sometimes present and sometimes only to be inferred.¹⁸ An adequate terminology should reflect the mandatory presence of the one component of metaphor and the discretionary presence of the other. That is, while one component must be manifest through some linguistic means, the other

¹⁸

The presence of the tenor depends on the grammatical structure of the metaphor. This fact, which is rarely mentioned, can best be explicated by using the grammatical types Brooke-Rose isolates in her study *A Grammar of Metaphor* (London, 1958). Only her classification of noun metaphors, not of verb metaphors, reflects the presence or absence of a term(s) signifying the tenor. For this purpose I propose extending her noun categories to cover verb metaphors as well. Among the grammatical types relevant for this purpose are "simple replacement," "the pointing formula," "the copula," "the genitive." In both the pointing formula and the copula, the tenor is present in the

can remain an idea only.

Max Black, in his celebrated article on metaphor,¹⁹ brought into philosophical discussion the ideas promulgated by the literary critics we have discussed above. In philosophical literature he is generally credited with the "interaction" theory of metaphor, although he clearly acknowledges his debt to Richards et al. Black makes a number of significant contributions and emendations to Richards. He drops the tenor-vehicle terminology, substituting for tenor, "principal subject," for vehicle, "subsidiary subject," and also introduces a new set of distinctions. A metaphor is not an isolated term, he claims, but a sentence.²⁰ Thus he calls the metaphorical sentence "the frame" and the word or words used metaphorically "the focus:" the frame imposes "extension of meaning upon the focal word" (Black, p. 39). As we indicated above an important consideration in dropping the tenor-vehicle terminology is Richards' vacil-

¹⁸ (cont.) - text. A portion of the sonnet discussed above illustrates the pointing formula, which involves some sort of apposition between tenor and vehicle. The copula metaphor, a favorite example for philosophic discussions, is a clear case of the presence of both tenor and vehicle, and involves the overt statement that some tenor, signified by A, is some vehicle, signified by B. In the case of simple replacement, the tenor must be inferred. In metaphors with a genitive link, the tenor is sometimes present, sometimes only to be inferred. In what Brooke-Rose calls the two-term formula, "'the B of C' in which B = C" such as "the fire of love," the tenor is present. In the three term formula, "the B of C = A" A, the tenor, can be mentioned, e.g. "the cuckoo is the messenger of Spring" or it may have to be inferred from either the general context, or from the genitive construction itself. An example of the latter is Wallace Stevens' metaphor, "the slum of bloom," where we can infer that the tenor is a garden since that is the sort of thing that can be in bloom.

¹⁹ M. Black, "Metaphor," *Proceedings from the Aristotelian Society*, Vol. 55 (1954) pp. 273-294 and reprinted in *Models and Metaphors*, (New York, 1962), Chapter 3.

²⁰ See my criticisms of this position in Chapter 3, p. 116.

lation regarding the use of the vehicle: is it the idea signified by the focal word? is it the contextual and conceptual inferences relating to the focal word? Black uses "subsidiary subject" to indicate the former and introduces the concept of "a system of associated commonplaces" for the latter notion. This "system of associated commonplaces" plays a central role in Black's emendation of the interaction theory, for his distinction allows us to see that it is the vehicle in this latter sense that interacts with a second component to produce the meaning of the metaphor. Black makes explicit what Richards only hints at, namely that a metaphor does not merely invoke two subjects but, in the case of the subsidiary subject, it involves "a system of associated commonplaces [which] serve as a lens or filter through which and by virtue of which we organize our view of the principal subject."

Black illustrates his point with the example "Man is a wolf." He suggests that the reader or listener, in order to understand the metaphor, must not only know a dictionary definition of "wolf," but more importantly must possess a layman's knowledge of things believed to be true of wolves. These commonplaces need not be true as long as they are generally held to be the case; that is, "they should be readily and freely evoked." Black summarizes his position as follows:

Literal uses of the word "wolf" are governed by syntactical and semantical rules, violation of which produces nonsense or self-contradiction. In addition, I am suggesting, literal uses of the word normally commit the speaker to acceptance of a set of standard beliefs about wolves (current platitudes) that are the common possession of the members of some speech community . . . The idea of a wolf is part of a system of ideas, not sharply delineated and yet sufficiently definite to admit of detailed enumeration (pp. 40-41).

What interacts with the principal subject, man, is not the definition of wolf, but this system of implications.

Richards had already maintained that metaphor is not just a transaction between words, but between thoughts or contexts, not only a displacement of words but a "borrowing between and intercourse of thoughts, a transaction between contexts" (*Philosophy of Rhetoric*, p. 94). Yet this stance remains in the background of this analysis. The system of thought surrounding one component of metaphor is brought by Black into the analysis of interaction. Although his contribution is a genuine addition to theories on metaphor, there is a sense in which he is saying nothing new, but something old in a more formal manner; for it is a commonplace that metaphor depends on a word's associations as well as its meaning, on its connotations as well as on its denotation.²¹ It appears as if Black has incorporated this view into the interaction theory by claiming for these associations the character of a system of ideas. The incorporation results in making prominent the associative links. But Black provides no arguments to bolster the contention that it is not only the definition, but the system of implications which figure in a metaphor. Indeed much of what Black cites as "associated commonplaces" might just as well be considered a part of the definition of wolf: that he preys on other animals, is fierce, is a scavenger. (This would not be true of the emotive associations, such as "a hateful and alarming creature.")

Black, however, is right to call our attention to some system of ideas that is operative in metaphor. The vehicle cannot be confined to a given, isolated idea or definition. Witness the difficulty Richards has in speaking of a metaphor from *Othello*, "Steep'd me in poverty to the

²¹The terms "connotation" and "denotation" are here used as they are in literature, not in logic.

very lips." Richard calls the vehicle "the sea or vat in which Othello is to be steeped" (*Philosophy of Rhetoric*, p. 64). In the passage from which this line is taken, there is no mention of sea or vat. These are at best contextually related to what we might think Richards would have called the vehicle, i.e. "steep'd." But to speak of the action of the metaphor, Richards must make use of words and ideas related to the ones actually used in the metaphorical utterance.

The reason for this is not only intrinsic to metaphor, but to the nature of language itself. I want to claim that the reason a system of ideas is called into play, is that the very meaning of a word depends on such a system. There is no term which can be considered in isolation from every other term. This is true even of a word such as "wolf," which can be specified referentially--we isolate the bit of sound "wolf" and apply it to some discrete entity in the world. But once we wish to repeat that bit of sound, so that we may again apply it to that "same" entity, we already encounter the need for a system of sound differentials, for we need to establish what will constitute the "same" sound. Within natural language, such a system of acoustic differentials must be accompanied by a system of concepts against which the relevant differences can be established. (Outside of natural language, if we are not working with a system of concepts, we need some measuring device which is calibrated into disjoint and differentiated units in order to have a measure by which, or against which to consider certain sounds as the same, and others as different.) In addition to encountering the need for "systems" in order to establish the referential use of "wolf" to name an individual wolf, we find that it is not possible even to maintain the identity of the referent without a

set of concepts or labels to designate that object's differentia, that is, to designate what the object is not. Thus when we try to conceive of a term in isolation from all other terms in a language, believing that our best hope is with a term used purely referentially, we soon find ourselves enmeshed in systems of terms, systems of sounds, and systems of ideas. The isolated meaning of "wolf" cannot figure in an interaction theory of meaning because a single term with its isolated meaning does not exist in language and thus cannot function in any theory describing linguistic phenomena.

Two important questions must be raised with regard to Black's version of the interaction theory. Firstly, why is only one system of implications brought into play? Why is the system of ideas associated with the principal subject not brought into the interaction? Certainly man is as much a part of a system of ideas as is wolf and certainly it is not the definition of man which is modified in the metaphorical interaction with wolf; the definition of man is fairly stable through various metaphoric appearances. It is rather the system of ideas of which man is a part that is revised in light of the metaphor. Moreover, it seems that if the principal subject is not considered as a part of a system of ideas, then the distinction between the principal subject (or tenor) and the meaning of a metaphor becomes more difficult to maintain.

I noted before that in some metaphorical utterances the tenor is present in the text while in others it must be inferred. Indeed, sometimes the tenor is extracted only with a difficulty equivalent to that of arriving at the very meaning of the metaphor. Some of T.S. Eliot's metaphors illustrate this well. In the lines:

Then how should I begin
 To spit out the butt-ends of my days and ways

Are "the butt-ends of my days and ways" the latter part of each day, or the end of my life, or the discarded, unusable part of my days and my actions or. . .? And how do these various interpretations, simple as they may be, differ from the meaning of the metaphor since they themselves are gotten by considering the phrase "my days and ways" through the vehicle of cigarette or cigar butts. In this example, the tenor itself seems a product of an interactive process with the vehicle rather than a component of the interaction. The indefiniteness in identifying the tenor or principal subject suggests that perhaps metaphors are not so easily resolved into two separable ideas. However, if we maintain that the principal subject is also a part of a system of ideas, then we need only identify the general system of ideas operative in the metaphor for the distinction between the meaning and the principal subject to be maintained.

The second question is whether or not Black is correct in assuming that the system of ideas involved is the system of associated commonplaces. If his assumption is correct at all, it is appropriate only to those metaphors which have been so dislodged from their originating discourse that the reader or listener can only be guided by commonplaces in his interpretation. To some extent, Black is aware of the limitation in his approach: he covers himself by saying that the system of implications can be ideas brought forth by a particular context, as when a poet guides a reader, establishing

a novel pattern of implications for the literal uses of the key expressions prior to using them as vehicles for his metaphors . . .

Metaphors can be supported by specially constructed systems of implications, as well as by accepted commonplaces; . . .
 (*Models and Metaphors*, Chap. 3, p. 43)

But it seems rather that the associations of a word are always guided by the "system of implications" constructed by and from the context in which a word is used.²² The so-called commonplaces are simply one system among many which attach to a word. That these commonplaces are the core of the associations surrounding a word is a myth of "ordinary language philosophy" which sometimes tends to grant to banality a privileged status.²³ We substitute a halo of commonplaces for the implications constructed from context, but do so only out of ignorance, when we are confronted with something that looks like a metaphor, but has been wrenched from its native context.

Nelson Goodman's treatment of metaphor deals with both these issues. Probably more than any other writer on metaphor he has recognized the importance of seeing it as the interaction of two systems, rather than of two terms or two ideas or two referents.²⁴ He writes:

An understanding of metaphor further requires the recognition that a label functions not in isolation but as belonging to a family. We categorize by sets of alternatives. Even constancy of literal application is usually relative to a set of labels; what counts as

²²The possible exception to this statement may be certain evaluative associations, such as the moral disapprobation attached to "murder," but not to "kill." But such close associations may be more properly construed as a part of the meaning of the word.

²³What is touted as the "ordinary use" of language is only one of the many uses to which language is in fact put.

²⁴The view that a metaphor has two referents is held by Douglas Berggren, in his essay, "The Use and Abuse of Metaphor," where he says "what Black calls the 'linguistic focus' of any metaphor has at least two referents."

red, for example, will vary somewhat depending upon whether objects are being classified as red or non-red, or as red or orange or yellow or green or blue or violet.

(*Languages of Art*, p. 71-72)

On the previous page Goodman, in attempting to distinguish literal falsehood from metaphoric truth, remarks that to say of a gray picture that it is yellow is not metaphorical but simply false, whereas to say of that picture that it is sad is literally false (only sentient things can literally be sad), but metaphorically true. But to say of it that it is gay, is both metaphorically and literally false. He states,

Just as the picture clearly belongs under the label "gray" rather than under the label "yellow," it also clearly belongs under the label "sad" rather than the label "gay" (p. 70).

This observation appears to motivate the introduction of the system of labels in the passage on the subsequent page. In applying literal labels it may seem to us that we apply them directly, without the mediation of other labels--gray can, after all, simply be pointed to, or so it seems. The sadness of a picture cannot be pointed to. Moreover, pointing to a picture to identify it as sad is to guarantee the falsity of the attribution, for a picture has not those attributes normally required of the subject to which "sad" may be applied. Thus such metaphorical attribution appears more clearly to be possible only by virtue of the mediation of other labels: it is "sad" rather than "gay."

These sets of labels are, however, quite different from Black's "system of associated commonplaces." Sad is not a commonplace associated with gay, but is a term which stands in an antonymous relation with gay. Moreover, Goodman is a nominalist and as such we can hardly expect him to endorse the view that the systems operative in metaphor are systems of ideas, commonplace or otherwise. He deals only with systems of labels

and their application. Labels are purely nominalistic and the realms over which they range are purely extensional.²⁵ With this in mind we look at Goodman's view of metaphor.

Goodman claims that in a metaphor we do not simply extend the range of application of a given label, but that that label, together with the labels with which it forms a schema of classification, is shifted to a new realm of application:

Now metaphor typically involves a change not merely of range but also of realm. A label along with others constituting a schema is in effect detached from the home realm of that schema and applied for the sorting and organizing of an alien realm . . .

The shifts in range that occur in metaphor, then, usually amount to no mere distribution of family goods but to an expedition abroad. A whole set of alternative labels, a whole apparatus of organization, takes over a new territory.

(*Language of Art*, pp. 72-73)

Let us contrast Goodman's views with those of Richards and Black. To begin with, Goodman's analysis involves not one, but two systems--one for each component of the metaphor. For the component which Richards would have called the vehicle, Goodman substitutes a set of labels; for the tenor, a realm normally associated with a different set of labels. Moreover the systems of the labels have less to do with the commonplaces surrounding a word and more to do with a label's relation to other labels. That relation is such that each of a set of terms can replace one another within a given grammatical structure and contextual frame.²⁵

²⁵ Goodman's terminology is somewhat idiosyncratic and therefore it will be useful to provide a short glossary. A label is a means by which we classify objects or other labels. A label has an application to the object or aggregate of objects to which it applies. What the label applies to is its extension. A schema consists of a set of labels. The aggregate of the ranges of extension of the labels in a schema is called a realm. Goodman points out that even a label with a unique range of extension rarely operates in a unique realm since realms depend on the schema invoked and a label is to be found in a number of different schema, as is evident by the relatively simple example Goodman provides above.

Goodman's schema and realms, insofar as they constitute paradigmatic sets of terms and their corresponding ranges of extension, do not consist of an indefinite set of ideas which somehow hover about a word and which accompany it in its various wanderings. These paradigmatic sets of terms are rather more definite, in part determined by and in part determining a particular use of a word.

Context becomes particularly important in this regard. Whether construed as specifically as 'the sentence in which a word occurs,' or as generally as 'the conventions surrounding a certain discourse,' context delimits the possible terms that fill a given 'slot' within that discourse, establishing for every term a paradigmatic set from which it has been chosen. And every active element of context²⁶ delimits the language further. There is no language "out of context" and though a bit of language may have been sundered from the context in which it was originally uttered and thus "out of context"--that is, out of its context--we cannot understand anything in language without supplying one for it. If there is "pure nonsense," it is language for which we are unable to supply a context. As fundamental a notion for language as it is, context is at the same time the vaguest of all linguistic concepts. Yet for all its vagueness, it cannot be discounted. And while we may be at a loss as to

²⁶That is those aspects of context which are appropriately brought to bear on what is being said (the tone of the voice, for example), is sometimes but not always a relevant part of the context of utterance.

how to specify context, we may be more successful in specifying what it does. One such function, I claim, is the establishment or delimitation of what Goodman calls the schemata of labels and their corresponding realms, and what I will call semantic fields. The associations of which Black speaks are concepts related in a variety of ways to these schemata or semantic fields.

In the foregoing pages we have tried to identify the two components of a metaphor and we may conclude that while Samuel Johnson was correct in his assertion of the duality in metaphor, the duality concerns nothing so "simple" as "ideas." A metaphor involves not two ideas but two complexes--two systems and these systems are not vague associated commonplaces, but some more structured aspect of the system of language itself.

In order to arrive at this conclusion, we have begun to deal with some views of the interaction between these components, but aside from the negative characterization of this relation by contrasting it with ambiguity, we have not grappled much with what is meant either by "perspective" or "interaction." In fact, discussions of the relationship between the two parts of metaphor are generally vague, often misleading and at best suggestive. Rarely are they systematic. The problem begins, of course, with the fact that one can scarcely hope to be lucid on the nature of a relationship when the character of the relata remains obscure.

If the conception of metaphor as filter, perspective or "stereoscope" is more perspicuous than the earlier conceptions of metaphor as decoration or comparison, how are we to explicate metaphor as perspective? In what sense(s) is one component used as a way of thinking about another?

Richards says little more than that in the interaction the two

components, tenor and vehicle, must remain conceptually independent.²⁷ Burke is more helpful when he assimilates metaphorizing to categorizing, and claims that the difference has to do with the incongruity within metaphor guided however by special interests--interests different from those guiding our usual classifications. As classification and categorization is an ordering--the intrusion of an incongruity is a disordering forcing a reordering if anarchy is disallowed--hence a new perspective is achieved, a new if tenuous, point of view on the issues at hand.

Black's most systematic statement concerning the inner workings of a metaphor may be located in the following passage:

The effect, then, of (metaphorically) calling a man a "wolf" is to evoke the wolf-system of related commonplaces. If the man is a wolf, he preys upon other animals, is fierce, . . . Each of these implied assertions has now to be made to fit the principal subject (the man) either in normal or in abnormal senses . . . A suitable hearer will be led by the wolf-system of implications to construct a corresponding system of implications about the principal subject. But these implications will not be those comprised in the commonplaces normally implied by literal uses of "man." The new implications must be determined by the pattern of implications associated with literal uses of the word "wolf." Any human traits that can without undue strain be talked about in "wolf-language" will be rendered prominent, and any that cannot will be pushed into the background. The wolf-metaphor suppresses some details, emphasizes others--in short, organizes our view of man.

(Author's emphasis, p. 41)

This statement is helpful but it is somewhat misleading. For one thing, the wolf-system of implications is indefinite and it is absurd to think that each of these implied assertions (and why must they be assertions?--sometimes commonplaces are persistent questions) gets applied to

²⁷ He suggests, for the practical analysis of literary metaphors, that the relative contribution of tenor and vehicle can be a basis for the typology of metaphor. But he is silent as to the theoretical questions concerning the nature of the interaction.

the principal subject. Moreover, just what characteristics get chosen depends in large measure on the tenor, or principal subject. The system associated with wolf as used as a metaphor for man will differ considerably from a metaphor where wolf serves as a vehicle for, let us say, the wind:

In the deserted land, the wind, a lone wolf, howled in the night. The commonplaces that Black cites, that the wolf preys upon other animals, is fierce, hungry, a scavenger and so on, figure little or not at all in wolf-system as it is used as a vehicle for wind. It is not, I contend, that they cannot be made to fit the principal subject; it is rather that most of these attributions would not even be picked out to be so tailored to fit wind. Since the system of implied assertions is bound to be very large, a principle of economy must reign. Granted then that the set of implied assertions is first delimited by the principal subject, is Black correct in maintaining that,

Any human traits that can without undue strain be talked about in "wolf-language" will be rendered prominent, and any that cannot will be pushed into the background.

My first objection is to the phrase "without undue strain." That may be true of the not very adventurous metaphor "man is a wolf." But metaphor would hardly be the potent instrument that it is if it operated "without undue strain." To cite only some of the metaphors we have already spoken of, is it "without undue strain" that we speak of being "steep'd in poverty," or of gardens as "slums of bloom," or of life as cigarette butts. Indeed, most interesting metaphors involve a great strain in language and thought, a situation generally recognized by proponents of the perspectival or, more precisely, the tension view of metaphor. As Black himself presumably belongs to that school, it is odd to see him attempt to resolve the tension

in metaphor in the passage quoted above. Perhaps he has been misled by his example.

My second objection also centers around the resolution of tension between the two subjects as described here. He claims that the human traits that can be spoken of as wolf-traits become prominent and those which cannot recede in importance. But here the line between a metaphor and the creation of a hybrid, fictive entity becomes very thin. When the wolf metaphor "suppresses some details, emphasizes others" does it really organize our view of man, or does it rather erect a fairytale creature, part man, part wolf?

Black introduces another way to talk about the interaction in metaphor. He asks us to envision "a piece of heavily smoked glass on which certain lines have been left clear" through which we view the night sky. Only some stars will be perceived and those will be organized by the lines of the screen. The metaphor then serves as the screen and "the system of 'associated commonplaces' of the focal word as the network of lines upon the screen" (p. 41). If we add to Black's analogy the condition that the screen be altered depending on the place and time and point of observation, then many of our objections to Black's previous statement do not apply. This second amplification of "interaction" then is somewhat more satisfactory--especially as the screen and the sky cannot be conflated--but it is also more suggestive, less systematic. It needs to be explicated further and the disanalogy stated clearly--for one thing, neither the screen nor the sky are the fluid phenomena treated in the linguistic and contextual aspects of metaphor. Ultimately Black cannot treat "interaction" more systematically, without lapsing into a description of non-metaphor,

because he is working with as unsatisfactory a notion as "associated commonplaces."

A somewhat more satisfactory account is given by Henle in his contribution of the collection, *Language, Thought, and Culture*.²⁸ He writes:

Metaphor, then, is analyzable into a double sort of semantic relationship. First, using symbols in Peirce's sense, directions are given for finding an object or situation. Thus [far], use of language is quite ordinary. Second, it is implied that any object or situation fitting the direction may serve as an icon of what one wishes to describe. The icon is never actually present; rather, through the rule, one understands what it must be and, through his understanding, what it signifies.²⁹ (p. 178)

If we analyze metaphor as a 'double semantic relationship,' then we are not likely to fall into the trap of construing interaction as a mere conflation. There are two semantic moves involved in understanding a metaphor, one not different from literal use, the other dependent upon some sort of iconic signification and built upon the first semantic move. That the interaction is perspectival is quite evident in this analysis.

The iconic relationship, however, being built upon similarity and resemblance, is very problematic. Goodman's criticisms of the usual theories regarding representation indicate how difficult, indeed futile, it is to distinguish conventional signs (symbols) from those which signify by virtue of similarity (icons). The relevant distinction, claims Goodman, lies elsewhere, namely in the relative density or relative

²⁸ According to Peirce, a sign which is a symbol signifies by means of an arbitrary connection between itself and the object it signifies. An icon is a sign which signifies by virtue of some resemblance between itself and the object it signifies. See C.S. Pierce, *Collected Papers*, Vol. II, p. 247 ff.

²⁹ Ed. Paul Henle, "Metaphor," Chap. 7, (Ann Arbor, 1965)

differentiation of marks or utterances and their applications.³⁰

Goodman's own view makes little use of the concept of similarity. While it is close to my own, there is one important difference--a point of difference which cannot be accommodated within one theory. Goodman writes:

In all this, the aptness of an emphasis upon labels, of a nominalistic but not necessarily verbalistic orientation, becomes acutely apparent once more. Whatever reverence may be felt for classes or attributes, surely classes are not moved from realm to realm, nor are attributes somehow extracted from some objects and injected into others. Rather a set of terms, of alternate labels, is transported; and the organization they effect in the alien realm is guided by their habitual use in the home realm (p. 74).

"Label" sounds comfortably neutral with regard to any epistemological or ontological positions. But when we ask the question: exactly what does Goodman mean by "label," we find either that some non-nominalistic claims are smuggled in or the whole problem reduces to incoherence. Is a label a sign in Saussure's sense, whereby it is constituted by both a signifier and a signified? It would seem not, for a "signified" cannot be characterized in purely extensional terms. Then a label is perhaps the signifier alone. Given Goodman's use of label throughout the *Languages of Art*, this seems to be generally the sort of thing he has in mind. Moreover, Goodman's label seems to be very much like Saussure's signifier in that it is both arbitrary in and of itself, and is systematically related to other signifiers. However, between the label and its application to things in the world there is not the mediating level of the signified which we find in Saussure.

If Goodman's labels were signs, then clearly non-nominalistic

³⁰See discussion below in Chap. 4 on notation.

presumptions would be included in his theory. But if they are signifiers only, then a schema of labels is not to be identified with a semantic field, but with a lexical field, where a lexical field is a set of lexical items which exhibit certain paradigmatic relations among themselves, while a semantic field includes the lexical field but also specifies a conceptual realm covered by these lexical items. There appear, however, to be sets of lexical items, that is, lexical fields which have only minimal constraints on the sorts of conceptual realms to which they may apply. They are not purely signifiers, without any "signifieds," such as nonsense words (or the set of words used by Gombrich and Goodman, 'ping' and 'pong'); although they seem quite intelligible, they are not fixed to any particular conceptual realm. These terms tend generally to be adjectives or adverbs, which are most tenuous in regard to their proper field of application, that is, most easily extended. (This is in contrast to nouns which are most closely tied to a conceptual realm, and only with much difficulty extended.) Adrienne Lehrer, for example, points out that "the lexical set(hot, warm, cool, cold) have meanings in the general domains including temperature, personality type, colors, and sensations."³¹

I want to add that the more domains in which a set of lexical items has meaning, the less the term can be used metaphorically. Evaluative adjectives and adverbs are most loosely tied to a field of application. And it is for this reason that it is difficult to imagine how the terms "good" and "bad" might be used metaphorically. They are purely evaluative terms, attached to no particular conceptual realm, and except insofar as

³¹ See A. Lehrer, "Static and Dynamic Elements in Semantics, *Hot, Warm, Cool, Cold*," *Papers in Linguistics*, Vol. 3, pp. 349-373.

one considers evaluation itself as a conceptual domain, they float over virtually every other domain, at least over all those whose referents may be subject to evaluation. My point is that this set of labels is not likely to find a metaphoric use, because it has no conceptual domain of its own. The prior habituation which, according to Goodman, guides the way in which the transferred set of labels will be used in their new realm of application does not suffice to make metaphor. "Good" and "bad" have a long, even revered history of past usage, but they have no home territory, hence no conceptual content (besides their relative evaluative one) to bring with them to new territory. It is that conceptual content which serves as a mediation between a set of labels and a new application--a mediation which makes metaphorical statements, in the phrase of C. Mason Myers, "mediatively informative."³² Without such conceptual content, a metaphor is not "a happy and revitalizing, even if bigamous marriage," it is merely an ordinary divorce and subsequent second marriage. It is for this reason that a nominalistic orientation will not, I believe, work in explaining metaphor. Goodman unwittingly slipped a conceptual content into his nominalistic labels to produce the "bigamous second marriage."

In this chapter I have canvassed some traditional and modern approaches to metaphor with the aim of distinguishing the important features of the perspectival theory. The latter is not a homogeneous construction, and I have attempted to suggest the contributions and weaknesses of its various versions. What has been determined is that insofar

³¹ C. Mason Myers, "Metaphors and Mediatively Informative Expressions," *Southern Journal of Philosophy*, Fall, 1968, pp. 159-227.

as metaphors are cognitive, they are perspectival. A perspectival theory insists that there are two components to metaphor and that these components interact in a manner akin to a double semantic relation. The components, we have concluded, must be systems, and their relationship must be more clearly defined than one based on an iconic similarity. Goodman's solution that a set of labels, conditioned by a habitual use in one extensional realm, get transferred to another extensional realm will not do. For it is not labels only but labels along with some content which get so transferred. A new perspectival theory must clarify what the components of a metaphor are, what the double semantic relation is, and what exactly gets transferred in a metaphoric shift of meaning. Our new theory will undoubtedly take us further along in understanding this most perplexing symbolic venture we call metaphor.

CHAPTER II

The Linguistic Frame

The perspectival view of metaphor which we found in the last chapter to be most amenable to explaining its cognitive potential calls upon an acceptance of the thesis that metaphor involves not two isolated terms or ideas but two systems, whether such systems be systems of terms, of labels, or of extensional realms.

I suggested that part of the reason for the obscurity surrounding the interaction between two such systems is that the nature of these systems has not been sufficiently clear. In the following chapter I wish to develop the notion of semantic fields, a notion borrowed from current linguistic theory and rooted in the tradition of Saussurian structuralism. Semantic fields, as we will see, help to explain at least part of what is included in the meaning of a sign. These fields, I want to claim, are the systems which are operative in a metaphor. Semantic fields, then will provide both lens and content giving us the perspective for which we value metaphor as a conceptual instrument; and the sense-relations will provide the means by which a reorientation in perspective is effected. We have claimed that metaphor is cognitive insofar as it involves two systems in perspectival interaction, and we will claim that the shift in perspective is effected by means of a crossing from one meaning system to another--from one semantic field to another.

It is plausible to fashion the question of the cognitive value of metaphor into a question of the meaning of a metaphor. If metaphors had not distinct cognitive import, that is, if they were comparisons or ornaments only, then they would be stylistic variations of some portion

of language which is presumably meaningful in an ordinary literal sense. Any cognitive import they might have would be identical to that of their translation into a literal paraphrase or comparison statement and thus their cognitive meaning would be completely coincidental with such a translation. But if metaphors are perspectival then they have a distinct and irreducible cognitive import. In that case they are meaningful but not equivalent to any literal restatement. My claim throughout this work is that the meaning which is particular to metaphor is also what makes metaphor particularly interesting from a conceptual standpoint. Thus the most prominent question in the remainder of the work will be the question, "What is metaphoric meaning?"

Metaphors may best be studied as a phenomenon of language. For a metaphor is foremost a sign: one thing, some A, is taken to stand for something else, some B. But to understand this displacement of a sign, we must first understand how the sign performs its usual function. That is to say that an understanding of metaphor, both in the general reflective sense "What is a metaphor?" and in the particular pragmatic sense "Am I here confronted with a metaphor?", is parasitic upon an understanding of signs. The most sustained and developed system of signs with which we are in contact is natural language, and it is the linguistic sign, in this case the linguistic metaphor,¹ which is most available to us as an object of study.

When we ask the question "What is meaning as expressed by metaphor?"

¹Some metaphors may not be linguistic, but, let us say, visual. See Max Rieser, "Metaphoric Expression in the Plastic Arts." (*Journal of Aesthetics and Art Criticism*, 17, 1958, 194-200).

we are asking about a particular manifestation of linguistic meaning. Linguistic meaning, however, is problematic in itself. Since different philosophical and linguistic theories of meaning have been proffered, we need to identify the theoretical framework best suited to encompass a notion of metaphoric meaning.

One can, in a fairly nonarbitrary way, classify theories of meaning into those which posit some entity as the meaning of a linguistic expression and those which try to explicate meaning without such a postulation. I will briefly examine some of these theories with regard only to their adequacy to give an account of metaphoric meaning, looking first at the former group of theories. Among those which identify meaning with an entity of sorts one can include referential, ideational and behaviorist theories. None of these, I will argue, allows for an extension of the notion of meaning to incorporate metaphoric meaning. My arguments are in response to admittedly simplified versions of each of these theories. However, I have chosen versions of the theories which, I believe, capture what is both essential to the theory in question and simultaneously least amenable to the incorporation of metaphoric meaning.

According to a generalized naive version of a referential theory, the meaning of a linguistic expression is an extralinguistic referent, something 'objective' to which the expression may be applied or of which it may be asserted. Now let us consider the expression "bees of England." Its reference, and hence, on the referential theory, its meaning, is the apian being, or the class of apian beings, that are to be found in England. The usual referent of this expression is clearly not the meaning Shelley intended nor the meaning that the reader understands in the poem "Men of

England." How then does "bees of England" get to be used to speak of the men of England? One might claim that for most terms in the language there are literal referents which correspond to literal meaning and metaphorical referents which correspond to metaphorical meaning. In the Shelley poem "bees" has a metaphorical referent, workers. But what if "bees" were used metaphorically, in another context, to speak of, let us say, a group of industrialists? Would we say that "bees" has these two (opposing) metaphorical referents, workers and industrialists? And with each innovative metaphor employing "bees" do we posit yet another metaphorical referent? Such an ad hoc resolution is unsatisfactory.

The ideational theory suffers from the same difficulty, for if the meaning of a term is an idea in the mind of the speaker or hearer, as an ideational theory would hold, then we must posit one idea or set of ideas which represents a term's literal meaning and a second set which represents a term's metaphoric meaning(s). One might also complain that the two distinct sets of meanings, be they referents or be they ideas in the mind, give us no indication of the relation between a term's literal and metaphoric sense.

The criticisms, which relate only to the adequacy of these theories to account for metaphoric meaning, could with some appropriate modification be applied to more sophisticated versions of these theories. To take only one such case, I will consider an updated version of the referential theory: An expression has meaning if and only if it can be given an interpretation in some possible world. Is there then a possible world in which "bees of England" can be given the interpretation, workers of England? But one's answer to this question, it seems, will be determined by one's answer

to the question whether it is correct to ascribe metaphorical as well as literal referents to terms. An affirmative answer yields the conclusion that metaphors are to be treated like any counterfactual conditional. What then is the difference between a metaphor and a counterfactual conditional? While the former may translate into a statement of the latter form, e.g. "If bees were workers of England then . . .," the latter does not easily (if at all) translate into metaphor. In the counterfactual conditional "If this cube of sugar were placed into a container of water then . . ." although we are speaking of the cube of sugar as if it were dissolved in water, this is not in any sense metaphoric in the way in which speaking of bees as if they were workers is metaphoric. A negative answer implies that we can no more speak of a possible world in which apian beings are human workers than of a possible world in which a circle is a square. In that case, how are metaphors to be distinguished from nonsensical utterances? The possible worlds version of the referential theory of meaning does not help us to resolve the problem of metaphoric meaning, it only raises the problem at a different point in the inquiry.

It seems that to try to give a behavioristic account of metaphorical meaning only underscores the inadequacies of this theory. Bloomfield claimed that the meaning of a linguistic form is "the situation in which the speaker utters it and the response which it calls forth."² In Bloomfield's case we need not speculate how he would adopt this conception of meaning to metaphor because he offers an explicitly stated view as to the meaning of a term used metaphorically. Bloomfield claims that each word has both a central and a peripheral meaning (*Language*, p. 146) and that a metaphor

²Leonard Bloomfield, *Language*, New York, Holt, Rinehart & Winston, 1933.

makes use of the peripheral meaning of a word. We can infer that the central and peripheral meanings are determined by the higher or lower frequency, respectively, of one set of situations in which the speaker utters a term and the response which is called forth. The flaws in this view are many. First, is it really the case that metaphors simply utilize a peripheral meaning? When we call workers "bees" are we not employing a rather central part of the meaning of "bees," that is busy, productive and social beings? And if it is the case, as Alston remarks (*Encyclopedia of Philosophy*, "Meaning," Vol. 5, p. 236) that "a moment's reflection should suffice to bring out the great variety of situations in which almost any given word . . . is uttered," and that "It seems clear that there is nothing in common to all these situations which is distinctive of the word," then the situation is even more acute in the case of metaphors. The presumed responses elicited by such metaphorical use range from bafflement to wildly elaborate verbal interpretations. Similarly, the stimuli to produce any metaphorical utterance are so diverse and occur with such little predictability (except for dead metaphors) that an attempt to thus specify a peripheral meaning seems quixotic.

The more sophisticated version of behaviorism favored by such thinkers as Morris and Skinner involve the disposition to respond as constituent of the meaning of a linguistic expression. But all such attempts fail in dealing with metaphor because all dispositional accounts of meaning depend on a certain predictability, measured perhaps as a statistically predominant distributional frequency of an expression. Metaphors (again except perhaps for dead metaphors which are more properly catachreses), by the very nature of their novelty and creativity, confound

such predictability and escape the measure of statistical probability.

The referential, ideational and stimulus-response theories of meaning all construe meaning as an atomistic entity which is attached to a term: in the first, meaning is a referent; in the second, it is an idea in the mind; and in the third, it is a frequency measure of a response to a stimulus or of a disposition to respond. Because metaphors have meaning but do not have the ordinary meaning of the words used in a metaphor, we are forced, when examining the meaning of metaphors, to attempt an approach to meaning which eschews the notion that to an isolated word or term we (once and for all) attach some isolated meaning. A fixed and atomistic conception of meaning makes of metaphor an anomaly, and of its comprehension a mystery.

When I say that these theories consider meaning as an atomistic entity, I mean that they speak of the meaning of a given linguistic term as an entity which can be considered apart from and in isolation of other linguistic expressions and linguistic activities. There are several theories which do not require that meaning is an atomistic entity. Among these I include the Wittgensteinian notion that the meaning of an expression is to be sought in its use, the generative grammarian's concept of meaning as the product of sets of semantic features which both connect and distinguish one word from other words of the language³ and the structural semantics of Saussure and post-Saussurians⁴ who claim that the meaning of a term

³ See Chapter II, pp. 100-101, where I argue against the accusation that meaning for the generative grammarians is but another version of the meaning as an entity thesis.

⁴ The structural semantics of which I speak must be distinguished from Bloomfieldian structuralism. In his recent book, *Semantics* (Cambridge University Press, Cambridge, 1977), Lyons makes clear the distinct and

is its location in a linguistic system.^{5,6}

Wittgenstein's motto that we are not to look for the meaning of a term but for its use allows us to regain the insights that we use language in many different ways, that there is not a single meaning which attaches

⁴ (cont.) - even contradictory aspects of the two schools of linguistics which have both been called structuralist: the Saussurian and the Bloomfieldian. The latter "structuralism" is applied to a methodology and theoretic framework in which the very notion of semantics is properly excluded from linguistic study. Bloomfieldians generally consider meaning to be too subjective a matter for the presumably scientific methodology of their school. Furthermore, while Bloomfieldian structuralism is in direct conflict with many of the principles of generative grammar, there is no such conflict between Saussurian structuralism and generative grammar.

⁵ Indeed the Wittgensteinian and Saussurian conceptions of meaning may not be as far apart as they first seem. Meaning as use may find a plausible explication in the elaboration of Saussurian concepts.

⁶ One should perhaps also include the speech act theory of language as a development which does not treat meaning as an entity of sorts. Ina Lowenberg, in an article, "Identifying Metaphor" (*Foundations of Language*, 12, 1975, 315-338) attempts an analysis of metaphor as a performative. I would agree that certain specifiable speech act conditions must be fulfilled in order for someone to successfully utter a metaphor or for one to identify an utterance as a metaphor. And while I might quarrel with some specific conditions Lowenberg sets for the successful utterance and identification of metaphors, I believe that she is essentially correct in claiming that metaphors are proposals of sorts with specific speech-act conditions which must be fulfilled. And as with other proposals, these are grounds for accepting and rejecting metaphors which are independent of truth conditions. However, and by her own admission, the speech act conditions still leave the meaning of the metaphorical utterance indeterminate. She writes: "The speaker's beliefs and intentions determine that his utterance of *p* [the metaphorical proposal] is to be taken as a metaphor but do not determine the meaning of *p*. *P*, uttered as an assertion and interpreted literally means what its constituent words mean . . . When *p* is a metaphorical utterance its meaning is still in some way related to its constituent words, although much less determinately." To the last statement she adds a footnote commenting "What this 'some way' is, is an interesting and unsolved problem." It is to this latter problem that I address myself. Thus a speech-act analysis is a complement, not an alternative to my project and thus I do not feel the need to consider it among the theories of meaning from which I have chosen the framework for a theory of metaphoric meaning.

to a word in all its manifestations, and that meaning does not exist in a pristine form separable from a word's employment in the language. A metaphoric use of language is one among the many that are possible. But a theory of meaning as use depends on a regularity of use as we find in language and as fixed by conventions and rules governing our language. Metaphors, however, are breaks in the regularities established by convention. They are creative (not just productive); they involve an irregularity of use. In this case, can we still speak of meaning as use? Without regularity there is no basis upon which to develop the idea that the meaning of a term is its use in the language. If a word were always used differently, it would have to be understood differently on each occasion and if meaning is use we would be left without the means to determine each different meaning. If meaning is regularity of uses and if metaphors break with established regularities, then we can speak of a metaphoric use, but not of a metaphoric meaning. This conclusion, however, appears to be a reductio ad absurdum of the contention that meaning is use, as applied to metaphor.

Finally then, we are left with the theories of generative grammar and structural semantics. For reasons that I argue in the following sections, I believe that a theoretical framework which combines elements from these two positions is most suitable for a new approach to meaning which will accommodate metaphor.

At the heart of my approach is Saussure's concept that language forms a system such that the units of the system are not independent but exist and are identified by virtue of the interrelations they form with other parts of the system. This thesis, as applied to the question of meaning,

yields the principle that the meaning of a term is a function of the system in which the term is embedded.

Metaphor, from Aristotle onward, has been thought to be a transference of meaning from one term to another. With the structuralist concept of meaning, the traditional definition of metaphor is transformed. A transference of meaning is not a simple displacement of an atomistic meaning but a move from one system to another, from the system in which the metaphoric term is embedded to another system which will give the term its new metaphoric significance. This conception of meaning accords well with the perspectival view of metaphor suggested in the previous chapter. We have arrived at the same conception: first, by considering the question of the cognitive import of metaphor; and second, by a search for an appropriate theoretic frame for the analysis of metaphoric meaning.

I proposed earlier that the systems involved in a metaphor are semantic fields. That aspect of meaning which is given to a word by virtue of its inclusion in a semantic field is the result of the sense-relations it shares with other words. Thus it is these relations which get transferred in a metaphor. A metaphoric transfer of meaning, then, is one in which the relations holding among the elements of one semantic field are displaced (transported) onto those of a second semantic field.

In the following section my aims will include a clarification and justification of the conception of meaning which I will use as the basis for a development of a theory of meaning and an elaboration of semantic field theory, incorporating aspects of the semantic theory of generative grammar so that it may be more adequate in accounting for metaphoric meaning.

Meaning in Structural Semantics

In the tradition following Saussure, meaning is conceived of as consisting of two aspects, value and signification. Value is the term used to refer to a word's relation to other words, while signification is used to speak of the relation between the acoustic or orthographic "image" and the concept associated with that image. Semantic fields, both historically⁷ and conceptually⁸ are a concretization of only one aspect of meaning: value. Signification, we will see, is given by the theory of semantic components largely developed by the theory of generative grammar. In this section we will explore the relation between value and signification so that we might find an integrative theory which will encompass both these aspects of meaning.

It is in his lectures, published posthumously (in 1916) under the title *Cours de linguistique generale*,⁹ that Saussure put forth the view of language as a interconnected system of signs such that an alteration among any of the elements involves a change in the entire

⁷ Charles Bally, "L'arbitraire du Signe: Valeur et signification," *Le Francais Moderne*, Vol. 8, No. 3, (1940), pp. 193-206; Jost Trier, *Der Deutsche Wortschatz im Sinnbezirk des Verstandes* (Heidelberg, 1931); W. Porzig, *Das Wunder Sprache* (Bern, 1950). Also see Suzanne Ohmann, "Theories of the Linguistic Field," *Word* 9 (1953) and Stephen Ullman, *Principles of Semantics* (Glasgow, Jackson, 1957) for a discussion of the history of field theory.

⁸ John Lyons, *Structural Semantics* (Oxford: Blackwells, 1963), pp. 59-90; *Introduction to Theoretical Linguistics* (Cambridge: Cambridge University Press, 1968), pp. 473-570 (abbreviated in text as *Theoretical Linguistics*), and *Semantics I*, Chapters 8,9 (abbreviated in text as *Semantics I*); Adrienne Lehrer, *Semantic Fields and Lexical Structure* (Amsterdam and London: North-Holland Publishing Co., 1974) (abbreviated in text as *S.F. and L.S.*).

⁹ Ferdinand de Saussure, *Course in General Linguistics*, trans. Wade Baskin (New York: McGraw-Hill, 1966 (abbreviated in text as *Course*)).

system.¹⁰ To understand the relation between the system and the meaning of a term within structural semantics we must begin with Saussure's conception of the sign. Ordinarily we speak of a sign as the material bearer of a certain conceptual content.¹¹ In the case of the spoken language, the sign is generally taken to be an acoustic¹² entity to which we attach some content. Saussure's proposal, which I shall adopt throughout this work, is that the sign be considered as a unit analyzable into both the psychological "image" we form of a bit of sound, the signifier, and the concept, also psychological, associated with that portion of sound, the signified.¹³ Saussure's proposal is based on the contention that the phonic aspect of natural language does not exist independently of the conceptual content: our differentiation of lexical items as distinguishable signs presumes that we have already differentiated them by means of their conceptual content, their semantic import. This is illustrated by the fact that when we hear a foreign language we do not understand, we cannot distinguish which portions of the acoustic chain should be marked off as

¹⁰Saussure often uses the model of the game of chess to indicate the primacy of system. He writes:

Just as the game of chess is entirely in the combination of the different chess pieces, language is characterized as a system based entirely on the opposition of its concrete units. (*Course*, p. 107)

¹¹See for example Frege, "Sense and Reference," *Translations from the Philosophical Writings of Gottlob Frege*, trans. P. Geach and M. Black (Oxford: Blackwell, 1970), p. 61. (Abbreviated in text as *S & R*.)

¹²Saussure use the phrase "sound-image" (in French).

¹³In the case of written language the "sound-image" is replaced by the orthographic image.

words. Additionally, the same slice of sound is not always the same sign (e.g., homonyms) and the same concept can be associated with different portions of the sound chain.

Signification results from the arbitrary, but conventionally established assignment of a given signifier to a given signified. But to speak of a "given signifier" and a "given signified" seems to presume the existence of pre-established bits of sound which can be correlated with distinct ideas. Saussure's claim is rather that sounds and ideas have no articulation, that is, do not exist as distinct delimited entities prior to their combination into signs. They exist, and each on their own plane, in an undifferentiated state.

We should note here that in order to adopt Saussure's view we need to make no ontological commitment as to the nature of reality as a continuum, broken up into distinct and differentiated entities by the action of language, a view often adopted by Saussurians. Besides the difficulty of arguing for the ontological claim, this view demands that we look upon language as having an efficacy with regard to extralinguistic reality which is at best problematic.

Saussure's claim is, I believe, a psychological one, involving no ontological commitment. Saussure insists that both the signifiers and the signifieds are psychological: they exist only in the mind of the speakers and hearers familiar with the language. The view that the concepts which are the signifieds have no articulation prior to their combination with signifiers, is even compatible with a Platonic ontology, since Platonic ideas have an objective status while signifieds, as psychological entities, are at best intersubjective. We may adopt Saussure's thesis, therefore, without thereby committing ourselves to a type of Whorfian hypothesis,

that concepts must always be relative to the language in which they serve as the signifieds, for while Saussure's thesis suggests such a line of thought, it is not a necessary conclusion to his conception of signification. For Whorf there can be no Platonic heaven of universal and eternal ideas. A Saussurian can maintain the relativeness of a given signified to a given language, without denying the possible existence of universal and eternal ideas. These eternal and universal ideas, in order to enter into our language system, must be mediated through the system of concepts which are the signifieds of that language--they would not be directly accessible, that is, they would not be immediately nameable by a portion of sound. Once brought into the language by the mediating system of signifieds, it would then be relative to that language. Perhaps one might say that for a Saussurian who is also a Platonist, the realm of eternal and universal ideas would, regarding the concepts employed in our language, occupy a position analogous to the Kantian noumenal realm in relation to the phenomenal one.

But even if we grant the psychological status of concepts the claim that concepts are not differentiated prior to their combination with a system of sounds appears to have the unacceptable consequence that persons who do not possess the spoken language, e.g. deaf-mutes and very small children, do not possess differentiated concepts. Deaf-mutes¹⁴ or, at least, those who have been taught sign language do possess a language and this allows us to see that not merely the spoken language but any language will do to differentiate a conceptual continuum--though it may do so in a somewhat different manner than does the particular spoken language.

¹⁴ See Hans G. Furth, *Thinking Without Language, Psychological Implications of Deafness*. New York, Free Press, 1968.

Similarly, children before they speak employ a variety of signs, they gesture, they use onomatopoeic sounds. Saussure's claim can be modified without doing violence to the basic principle in the following way: concepts become differentiated within some sign system, not necessarily a natural language although natural languages appear to be particularly well suited for such articulations.

A system of signs, then, is analyzable into two systems, that of the signified and that of the signifier. Prior to their combination, each is a system of "pure" differences, "differences without positive terms" (*Course*, p. 120). But these two systems of differences engender a system which has positive elements, that is, the system of signs. In Saussure's view, the formation of a single sign involves two entire systems, that of the signifieds and that of the signifiers, yielding not an atomic sign, but a system of signs. Signification is thereby considerably complicated. To deal with this added complexity, Saussure introduces the notion of value.

Every sign possesses not only signification, that is the relation existing between the signified and the signifier, but also value, that is its relation to or position among other signs in the system. He writes that all things which possess value are "apparently governed by the same paradoxical principle. They are always composed

- 1) of a dissimilar thing that can be exchanged for the thing of which the value is to be determined and
- 2) of similar things that can be compared with the thing of which the value is to be determined" (*Course*, p. 115).

In the case of things monetary, one must know what one dollar will purchase (e.g., it can be exchanged for a fixed quantity of groceries), but also that one dollar is equivalent to ten dimes, one hundred cents, etc. In the case of words, one must know that a given sound, let us say "sheep"

stands for the concept of a particular domestic woolly animal, but also that it is differentiated from the term "mutton" which considers that same animal as it is food for human consumption (or as it differentiated from the terms "cow," horse," i.e. from other domestic animals). The former constitutes signification, the latter value.

Things have value as they incorporate the two conditions stated above. But the signification of a term, the linkage between a sound and concept, is not independent of the value which that concept has by virtue of its relation to other concepts. Put simply, value belongs to each of the three systems, that of the signifier, that of the signified and that of the complete sign. Signification results when two of these systems come together: that of the signifier and the signified. If Saussure's contention that the signifier and the signified each receive articulation through their coming together in a sign, then one cannot bring together an isolated signifier and signified, value then is indispensable for signification.

An elaboration of the notion that a sign acquires its meaning from its position in a system of signs, must therefore begin with a discussion of value.¹⁵ While the phonetic component of language has been studied quite

¹⁵ I will be concerned with value among the signified and among the signs themselves. I leave aside, for the moment, the question of value in the system of the signifier. In natural languages the system of the signifier is the phonological system and has been much studied by linguists who have followed Saussure (see Trubetskoy, *Principles of Phonology*, trans. A.M. Christiane Baltaxe (Berkeley and Los Angeles: University of California Press, 1969) and Roman Jakobson, *Selected Writings I, Phonological Studies* (The Hague: Mouton, 1962)). To speak of the signifier of any other sign system involves the specification of the particular type of sign that is in question. A system of signifiers cannot be spoken of in abstraction from some particular sign system since the signifier, its structural characteristics, and even the units which constitute its elements are very closely related to, indeed, cannot be isolated from the material out of which the signifier is formed. Such is the nature of the signifier. On the other hand, the signified is always conceptual. And while we shall argue that

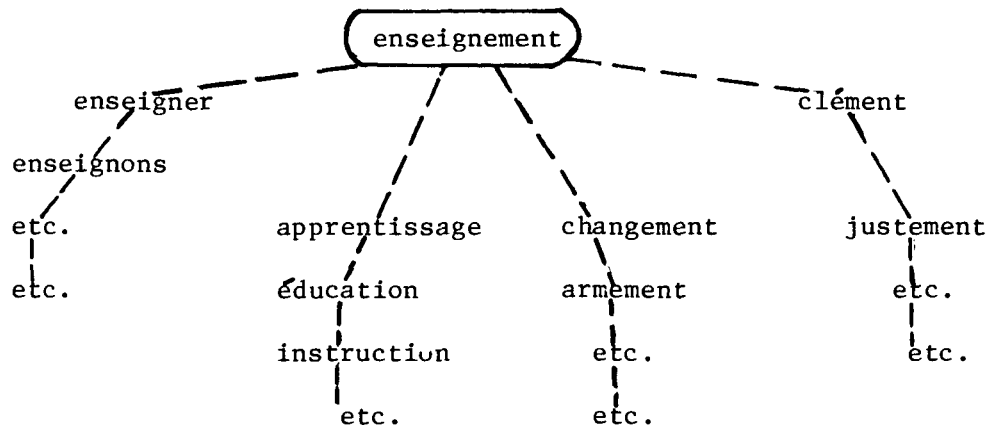
extensively as a system, and a strong case has been made for this aspect of language as organized as a system of differences and oppositions, little of a comparable nature has been done for the conceptual element of language. It is certainly not difficult to see why this is so. The phonetic material is readily available to be studied, it is limited and delimitable, it is perceivable by our sense of sound. Concepts lack this tangible quality; furthermore, it is not even clear what we study when we study them. The universalist-nominalist argument bears testimony to this difficulty. The system of signs, or in the case of language, of lexical items has received equally sparse attention. The sheer quantity of phenomena to organize is discouraging.¹⁵ Moreover, while words have a concrete identity, it is not clear that words constitute the elements of the language, when it is viewed as a sign system. Homonymy, polysemy, idioms, morphological elements such as prefixes, suffixes and stems, argue against considering words as units in a semantic inquiry so that we are not certain of the units of even the more concrete lexical system. But this is secondary to the more difficult problem of trying to impose a systematic structure on a phenomenon as diverse, unstable, and fluid as language. Certainly some parts of the

¹⁵(cont.) - the system of the signified is not properly a system, or rather is not fixed as a system, until it is the signified for some particular sign system, it is still possible to abstract from all sign systems and speak of the system of the signified. Similarly, the presumption of a semiotic study is that there are certain characteristics which are appropriately spoken of as belonging to all sign systems, and to the degree that such studies have been fruitful this appears to be a reasonable presumption.

¹⁶Stephen Ullman (*Semantics: An Introduction to the Science of Meaning*, Oxford: Blackwell, 1962) notes that while there are 44 or 45 phonemes in English, the Oxford English Dictionary currently records 415,000 words.

lexicon are ordered: inflectional paradigms are an example. But such isolated structures cannot possibly be said to impart meaning to a term. "I run" does not become meaningful merely by its opposition to "you run," he runs," etc.

Saussure himself does not more than hint at the sort of systematicity that underlies the semantics of language. He distinguishes between two sorts of relations: syntagmatic, that is relations which signs bear to each other in the linear unfolding of speech, and associative, that is relations which concern language as an immanent structure, not supported by linearity but residing in the minds of the speakers.¹⁷ While I shall later develop a notion of syntagmatic relations which are operative in semantic fields, it is the associative, or paradigmatic,¹⁸ relations as they have come to be called, which have been more prominent in the development of field theory. Saussure provides us only with a diagrammatic representation of associative links, illustrated for the French word "enseignement."



(Course, p. 126)

¹⁷ Saussure writes, "the associative relation unites terms *in absentia* in a potential mnemonic series."

¹⁸ The term *paradigmatic* is due to Louis Hjelmslev, *Prolegomena to a Theory of Language*, trans. F.J. Whitfield (Baltimore: Waverly Press, 1953), p. 24.

Some of these associations are morphological, "armement"; some purely phonic "clement"; some semantic, "instruction"; and some combine formal and semantic relations, "enseigner."¹⁹ These paradigmatic associations, claims Saussure, have generally no order or fixed limit: "A particular word is like the center of a constellation; it is the point of convergence of an indefinite number of coordinated terms" (*Course*, p. 126).

If the value of a word is constituted by such indefinite associative constellations (it hardly seems appropriate to call them *systems* since that term implies a structure with more definite relations among its elements) then it would appear that the value of a word is never really fixed and indeed is highly subjective.²⁰ However, given other statements by Saussure concerning value, we can form a conception which is not subjective.

Saussure claims for value the social characteristic of language. In a statement which bears remarkable resemblance in its insight to Wittgenstein's argument against a private language, Saussure states that because of the arbitrary nature of the sign,

the social fact alone can create a linguistic system. The community is necessary if values which owe their existence solely to usage and general acceptance are to be set up; by himself the individual is incapable of fixing a single value" (*Course*, p. 113).

¹⁹From this it is clear that Saussure's associative network concerns the entire sign and not the concept.

²⁰If the relationship between signification and value is as intimate as we have suggested, meaning itself is extremely subjective and a scientific study of semantics would seem improbable. If meaning is essentially subjective, then we are forced into either a Quinean repudiation of "meaning" in favor of a behaviorist view of language; or into a referential theory of meaning; or into a skepticism regarding the communicative efficacy of language--all consequences Saussure himself would reject.

The system, then, which establishes value is more properly a collective or intersubjective totality.

Furthermore, and this will have important implications for establishing a theory of semantic fields, the collective nature of the totality that is a language serves to limit arbitrariness in language. What Saussure means by the "arbitrariness of the linguistic sign" is the idea that there is no a priori necessity for a particular sound to carry a particular sense. Onomatopoeic words are not arbitrary in this sense though the various transformations from language to language of even these words indicate that these most motivated of words are to some extent arbitrary.

Language is based on the arbitrariness of the sign; yet, if every sign in a language were totally unmotivated, chaos would reign. The mind must impose an "order and regularity" among these signs and this yields what Saussure calls relative motivation. Thus we can say that "ten,"²¹ for instance, is a totally arbitrary sign, as are the signs "eleven" and "twelve," but "thirteen," "fourteen," etc., are relatively motivated. It is in the principles of arbitrariness and the limitation of the arbitrariness that we can see the role of value. Saussure writes:

If the mechanism of language were entirely rational, it could be studied independently. Since the mechanism of language is but a partial correction of a system that is by nature chaotic, however, we adopt the viewpoint imposed by the very nature of language and study it as it limits arbitrariness (*Course*, p. 133).

The arbitrary connection between the signifier and the signified is signalled by "signification;" the relative motivation established syntagmatically and associatively, and residing in the collective memory and competence of the language community, as well as the collective effort

²¹Arbitrariness is considered only from a synchronic vantage point.

to organize and group signs into localized systems, is what constitutes a sign's value.

It would then appear that values could, at least in some portions of the lexicon, be seen to emerge from "associations" that are somewhat more ordered and regular than Saussure's "associative networks." If a theory could combine the insight that language is a fluid phenomenon not easily fit into neat categories with the means to specify in what ways language tends to "limit" its inherent arbitrariness, then it might well answer the question Saussure poses when he states "In a language-state everything is based on relations. How do they function?" (*Course*, p. 122).

A number of early attempts were made to answer this question by linguists such as Charles Bally (Saussure's student), Jost Trier, and Porzig, to mention only the most influential. These early theories did little to elucidate the nature of the relations which bind together terms in a semantic field. This may be due to an over-reliance on the part of Saussurians and post-Saussurians upon the general notion of opposition and the strong emphasis given to binary opposition in particular.

Indeed much of the linguistics, anthropology, literary criticism and semiotics inspired by Saussure, which have maintained the dominance of the notions of relation and system in language, culture, works of literature, and other sign phenomena, have limited themselves to a single relation, that of binary opposition. The supposition appears to be that "the human mind tends towards dichotomization."²² But as many wise and prominent thinkers have claimed supremacy for the triad, and in many non-

²² Ernst Cassirer, *Symbolic Forms*, Vol. I, Yale University Press, New Haven, 1955.

European cultures the quadratic relation occupies the most exalted place in the conceptual schema (e.g. Pueblos, Zuni, and other American Indians), I place little faith in such speculations. An argument for the primacy of binary oppositions can be made on the ground that all other oppositions can be reduced to binary ones, just as multi-valued logics can be reduced to two-valued ones.

It may, at times, be useful to carry out a reduction of all relations to binary oppositions, if by binary opposition we understand a heterogeneous concept including oppositions of various sorts, some binary in a *primitive* sense (e.g. bilateral opposition), others binary only by virtue of a reduction (e.g. multilateral opposition).²³ At other times, however, the reduction masks important characteristics of certain relations among signs. The terms "beginning," "middle," "end" mark an important tertiary opposition so that a reduction of this relation to a set of binary oppositions, viz., beginning:middle, middle:end, beginning:end, may not be to the point.

In 1963 John Lyons (*Structural Semantics*) attempted to work out the semantic field, more specifically the lexical field, of knowledge words in Plato's corpus. To do so he found it necessary to specify a set of what he later called sense-relations which hold between the terms of a lexical field. These sense-relations, which are not confined to binary oppositions,

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In phonology, for example, Trubetskoy (*Principles of Phonology*, p. 68) claims that there are both bilateral and multilateral binary oppositions. Bilateral oppositions are those in which the sum of properties which serve as the basis for comparison of two phonemes (and notice that opposition requires that the two elements which are opposed have properties in common) is possessed only by those two phonemes in that language; multilateral oppositions are those in which shared properties are also common to other phonemes of the language. This distinction can be used for signs of a language as well: in English, father:mother, is a bilateral opposition and red:blue is a multilateral opposition.

include varying types of contrasts between conceptually-related words. In *Theoretical Linguistics* (1968) he states explicitly that these sense-relations are intended to be a concrete expression of a structuralist approach to semantics. He writes:

. . . At least some vocabulary items fall into lexical systems and the semantic structure of these systems is to be described in terms of the sense-relations holding between the lexical items. This statement is intended as a more precise formulation of the principle that 'the meaning of a term is a function of the place it occupies in its own system.' (*Theoretical Linguistics*, p. 129)

It is the investigation of the semantic systems which constitutes a term's value and which function in providing the meaning of a term, which will occupy us now. We will attempt to discover what these systems "look like," that is, how they are constituted; what their elements are and what the relations are which exist among those elements.

Lexical/Semantic/Conceptual Fields: Their Constituents and Structure

Let us first distinguish between lexical, semantic and conceptual fields. In making these distinctions we are making certain conceptual commitments. If we claim, with extensionalists, that there is no conceptual substratum of language, then we need not speak of conceptual fields. There then would appear to be little ground for distinguishing lexical and semantic fields.²⁴ Since I do not reject, a priori, the conception of

²⁴ Though even with such a bias it may be desirable to distinguish semantic and lexical fields. One may wish to include in lexical fields, all those terms which are related morphologically and perhaps even phonetically, while limiting semantic fields to those terms which are semantic cognates. Or one may wish to speak of a lexical field as including terms which bear the above semantic relations to one another and speak of a semantic field as one in which a given lexical set is limited to a given universe of discourse. (Here 'universe of discourse' serves as a functional equivalent to a conceptual field.) Thus the antonymous pair high, low may 'pattern' in the universe of discourse concerning temperature or concerning heights.

a conceptual substratum, I will differentiate between lexical, semantic, and conceptual fields as follows:

A LEXICAL field consists of lexical items, generally single words, but occasionally compounds, idiomatic expressions and conventionalized phrases.

A CONCEPTUAL field consists of interrelated concepts, an area of thought, identifiable but not exhausted by some *articulation*²⁵ of a sign system. We recognize a conceptual field by virtue of the fact that we can locate a number of signs which appear to be conceptually related. But this is not equivalent to saying that there do not exist (in some unspecified sense of "exist") conceptual fields unarticulated by some natural language or sign system. To claim that conceptual fields are limited to articulated fields is to close the possibility for new areas of thought to evolve. Of conceptual fields which have not been at least minimally articulated in some language translatable into our own, we can say nothing. Yet there is a grave difficulty in speaking of concepts apart from their articulation in some sign system. It is a problem similar to the one encountered by those who want to speak of propositions as distinct from their linguistic embodiment in sentences. Frege, in his article, "The Thought: A Logical Inquiry,"²⁶ argues for the objective status of propositions, or thoughts. I take concepts to have an intersubjective status.²⁷ For articulated, delimited concepts I claim not universality

²⁵ By *articulation* I mean the breaking up of a continuum into differentiated and distinct segments.

²⁶ in Peter Strawson, ed. *Philosophical Logic* (London: Oxford University Press, 1967), pp. 17-38.

²⁷ Frege argues that thoughts, as they are not material, must belong to the "inner world." But unlike the other occupants of that space, what Frege

and eternality, but a temporally conditioned collectivity. Concepts, unlike "ideas" (as Frege uses the term, that is, to convey subjective feelings, sensations, etc.), do not need to be "had," nor do they need a particular bearer. What they need is an articulation, through some sign system constructed and utilized, currently or formerly, by some collective group of sign users. Conceptual fields however do not need such articulation to be conceptual fields, they are there to be articulated by a semantic field. Conceptual fields are the conceptual substratum underlying language, independent of any particular language, but insofar as they are independent they are also unformed.²⁸ By "unformed" I mean that the conceptual field in this independent state does not consist of specified and individuated concepts, but of an undifferentiated continuum. The contrast is not between form and content but between something differentiated (formed content) and a continuum (unformed content).²⁹ Conceptual fields are unformed content, whereas a specified concept (and to be specified it must be articulated in some sign system) is formed content.

SEMANTIC fields, then, are conceptual fields that have been arti-

²⁷(cont.) - calls "ideas" (i.e. sense impressions, inclinations, desires, feelings, imaginings), thoughts are not subjective and are not dependent on a bearer for their existence. Frege believes that the Pythagorean theorem will continue to be, and to be true, regardless of whether it is thought by anyone. Accordingly ideas are "had" while thoughts are "apprehended" or "grasped," as we apprehend or grasp something external to us, and independent of us.

²⁸For example, the general conceptual domain concerning the phenomenon of electricity prior to any specific knowledge or any clear ideas concerning the nature of electricity would demarcate a conceptual field as yet unformed, --unformed content. Unformed content is perhaps not too different from Spinoza's unclear and indistinct ideas.

²⁹See L. Hjelmslev, *Prolegomena to a Theory of Language*, esp. p. 36.

culated by a set of lexical items. If there exists an isomorphism between two lexical fields, then we can say that not only do they cover the same conceptual field, but they also define the same semantic field. However, if there is an anisomorphism, then we must say that while these two fields cover the same conceptual fields, they define different semantic fields. Where no ambiguity will result, I will use lexical and semantic fields interchangeably, although the constituents of lexical fields are items which compose the vocabulary of a given language while the constituents of semantic fields are concepts as they are individuated in a given language.

Not all terms in a lexical field are of equal importance. Some terms, the basic words of a field, occupy a central position in the field, whereas others are peripheral. This distinction is a graded one and the determinations are criteria developed by linguists. It is the basic words which establish the important contrasts within a field. (See Lehrer, *S.F. & L.S.*, p. 10)³⁰

³⁰ Lehrer modifies the criteria used by Berlin and Kay in their important study of color terms. B. Berlin and P. Kay, *Basic Color Terms: Their Universality and Evolution* (Berkeley: University of California Press, 1970). In that study, Berlin and Kay take eleven terms as basic: white, black, red, green, yellow, blue, brown, purple, pink, orange and grey. Terms such as crimson, scarlet, blond, blue-green, bluish, lemon-colored, salmon-colored, "the color of the rust on my aunt's old Chevrolet" are excluded on at least one of the following criteria:

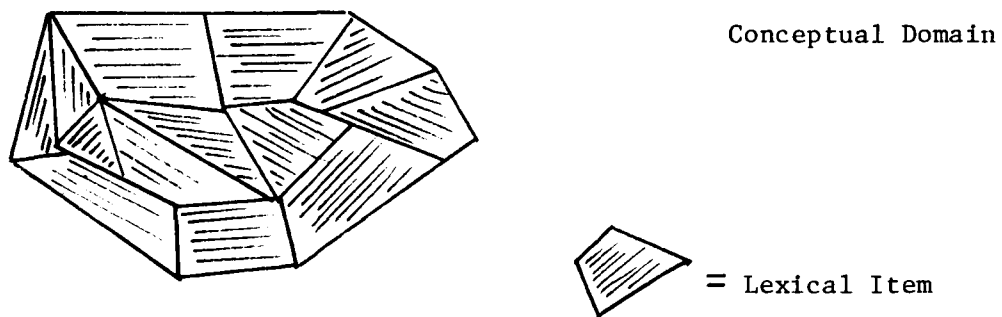
1) Basic words are monolexemic. A word is monolexemic if its meaning cannot be determined from the meaning of its parts. If it is not clear that a word is monolexemic, morphological complexity makes the word suspect.

2) The application of a basic word is not restricted to a narrow class of words, narrow relative to the lexical field. Thus blond, which can refer only to human hair, complexion and furniture is excluded.

3) Established criteria for psychological saliency must be met by basic words. Such criteria include a) a tendency to occur at the beginning of elicited lists of terms in that field, b) stability of reference across informants and across occasions of use and c) occurrence in ideolects of all informants.

4) The doubtful form should have the same distributional potential as the established basic terms. Thus, in English, where we can add "-ish"

A remark concerning the general structure of semantic fields is in order here. The earliest conceptions of semantic fields, such as that of Trier, were ones in which each term covers a determinate, or at least determinable portion of a conceptual domain and in which the entire domain is covered by the lexical field without gaps or overlappings. Kay and Berlin found in their study of color terms that while the boundaries of each color term in a given language are very unclear (that is, vary even in responses taken at different times from the same speaker), a focal point can be identified which remains remarkably stable in the responses elicited from a speaker at different times, from different speakers of a given language and even from speakers of a number of different and unrelated languages. Lehrer suggests that rather than regarding fields as mosaics, thus:



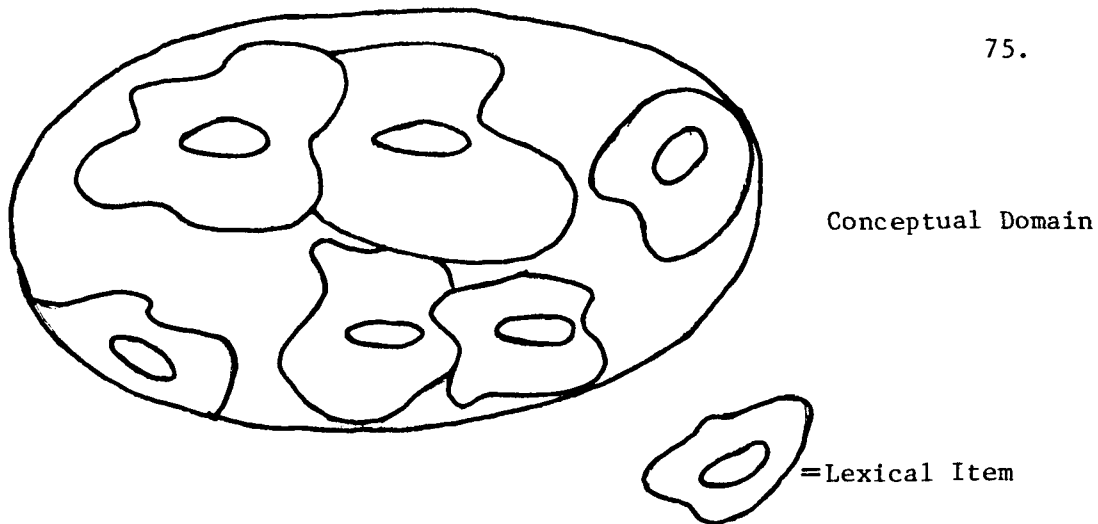
we should view them as consisting of certain major foci, thus:

³⁰ (cont.) - as a suffix to the basic color terms, e.g. reddish, greenish, we cannot say aquaish or chartreusish

5) Recent loan words are suspect.

The above list is held commonly by Berlin and Kay, and Lehrer. The following criterion Lehrer holds to be relevant but considers too restrictive for generalization.

6) The signification of basic terms is not included in that of other terms of the field, thus eliminating crimson and scarlet as these are both kinds of red for most speakers of English.



On this model, gaps and overlaps are to be expected and while each concept or term has a clear focus, it may have indeterminable boundaries.³¹

The Sense-Relations I: Paradigmatic Relations

It is the sense-relations holding between the elements of semantic fields which provide a term with its value. The sense-relations I take to be at the core of contemporary semantic field theory and most important to the use I will make of semantic fields in the theory of metaphoric meaning elaborated in the later chapters. These sense-relations are specified by John Lyons in his various writings on semantics, the most recent of which is the first volume of *Semantics*. In proposing that Lyons' relations are the relations governing semantic fields I am not suggesting that these relations form the definite set of appropriate rela-

³¹

The formalism of fuzzy set theory may offer the appropriate technical apparatus to handle this fluid conception of a field. To the extent that each lexical item can be treated as a set, fuzzy set theory can tell us how and to what extent a conceptual field is covered. Insofar as a semantic field can itself be treated as a set, fuzzy set theory can help identify the basic and peripheral elements of the set and may even be useful in clarifying how different semantic fields relate to each other.

tions. I look upon Lyons' relations as a workable, tentative first approximation to what the relations ordering semantic fields may be. An important omission by Lyons is the set of syntagmatic sense-relations. All of his relations are paradigmatic. I shall supplement a number of syntagmatic relations in a later section.

We begin with *synonymy*, a relation which, although philosophically very problematical, is the least interesting from the point of view of field theory. Synonymy is not interesting as a structural relation because all instances of synonymy could be eliminated from the vocabulary without affecting the sense of the remainder of the lexical items. Within structural semantics, the sense of a term is a function of the way in which that term relates to other conceptually-related terms. It is something beyond the means by which the referent of that term may be determined. Thus, questions of sense are not reducible to questions of truth conditions. For linguistic philosophers who take as the central questions in semantics the question of truth conditions synonymy plays a crucial role. Within field analysis where sense is divorced from considerations of truth-conditions it plays a fairly trivial role. To see this we need to keep in mind the fact that synonymy³² is often defined as the interchangeability in all contexts, *salva veritate*. We can see then why Quine writes:

Once the theory of meaning is sharply separated from the theory of reference, it is a short step to recognizing as the primary business of the theory of meaning the synonymy of linguistic forms and the analyticity of statements; meanings themselves, as obscure intermediary entities, may well be abandoned.³³

³² I refer here to "cognitive" synonymy. For a justification of the priority of cognitive synonymy, see Lyons, *Theoretical Linguistics*, p. 449.

³³ W.V.O. Quine, "Two Dogmas of Empiricism," *From a Logical Point of View*, (New York: Harper & Row, 1963), p. 22.

The small step that Quine speaks of is the reduction of the talk about meanings to the having of meanings (significance) and sameness of meaning or synonymy. When we give the meaning of an utterance we are simply giving a synonym.³⁴ It is for this reason that for those who hold that the question of semantics is primarily a question of truth conditions, the question of synonymy begins to bear the major portion of the problematics in the area of semantics. Lyons' definition of synonymy attempts to bypass some of these problems by adopting such notions as "pragmatic implication," "explicit assertion," and "explicit denial," which he defines empirically, without recourse to questions of analyticity. For the sake of simplicity, I will adopt Lyons' definition, not because I am convinced of its correctness, but because, given a structuralist theory of meaning, not that much hinges on its being correct.

Lyons defines synonymy in terms of bilateral implication or equivalence:

If one sentence S_1 , implies another sentence, S_2 , and if the converse also holds, S_1 and S_2 are equivalent. . . . If now the two equivalent sentences have the same syntactic structure and differ from one another only in that where one has a lexical item, x , the other has y , then x and y are synonymous. (*Theoretical Linguistics*, p. 450)³⁵

³⁴Quine, "On What There Is," *From a Logical Point of View*, p. 11.

³⁵In the above definition "implies" is to be understood as "pragmatic implication" which is based on "explicit assertion" and "explicit denial." Following Lyons, if we grant that in all languages it is possible to draw a correspondence between positive and negative sentences, then the negative sentence explicitly denies what was explicitly asserted by the positive sentence. By a correspondence between positive and negative sentences Lyons means something like: If S is a sentence and '-' is a monadic operator such that $\neg S$ is true if and only if S is false, then for any S we can form a sentence S' such that S' is identical to $\neg S$. Thus "John is not married" explicitly denies what is asserted by the sentence "John is married." Now, a sentence S_1 implies S_2 , "if speakers of the language agree that it is not possible to assert explicitly S_1 and deny explicitly S_2 ." And S_1 implies not S_2 "if it is agreed that

In contrast to the definition of synonymy as interchangeability which is truth-preserving in all contexts, Lyons' definition makes synonymy relative to a given context.³⁶ Lyons suggests that not only synonymy but other sense-relations as well are context dependent. He has a broad and encompassing notion of context involving the spatio-temporal situation of the utterance, including concurrent actions on the part of speaker and hearer; what has been said earlier, insofar as this is known by speaker and hearer and is pertinent; and "the tacit acceptance by the speaker and hearer of all the relevant conventions, beliefs and pre-suppositions 'taken for granted' by the members of the speech community to which speaker and hearer belong" (*Theoretical Linguistics*, p. 413).³⁷

In the following context "My _____ has just had puppies," the terms

³⁵(cont.) - the explicit assertion of S_1 makes impossible, without contradiction, the explicit assertion of S_2 " (*Theoretical Linguistics*, p. 445). It is clear that choosing such empirically specified concepts as "explicit denial" and "explicit assertion" does not resolve any philosophical puzzles about semantics. To choose such a tactic is simply to say: let us not worry about whether or not the concept of analyticity is well-founded, let us rather see how speakers employ the language and proceed from there.

³⁶ It is clear that the requirement of complete interchangeability is too strong, even when we limit synonymy to cognitive synonymy. This is indicated by the inappropriateness of substituting "unmarried man" for "bachelor" in "bachelor button," "bachelor of arts" and "'bachelor' has eight letters."

³⁷ By making synonymy context-dependent we can eliminate some problems in the requirement for complete interchangeability. "Bachelor" is not interchangeable with "unmarried man" in the term for the flower, "bachelor button" because the context of "bachelor button," its universe of discourse is floral and that context is not appropriate to "unmarried man." But we do not need context-dependency to solve the problem of interchangeability of synonyms in "bachelor button," for we can regard this phrase as one semantic unit, not decomposable into the two words which constitute it.

"dog" and "bitch" are completely interchangeable. The context has neutralized the difference between these two terms and within this limited context they are synonymous.³⁸ This is because there is a semantic field which includes the terms "dog," "bitch," and "puppies" with specified relations between them such that if the context can absorb some of the information regarding their relation, a limited type of synonymy can be posited between some of the terms.³⁹

³⁸ The claim that synonymy and indeed all sense-relations are context-dependent gains support from an independent inquiry. Lakoff's fuzzy set theoretic analysis of lexical items indicates that most terms do not definitely belong to a given category, but belong to such a category only to a certain degree. This is good reason for supposing that the meaning of a term is not fixed until it is used within a certain context. The context can operate so as to locate a term in one or another category, or leave its category indeterminate. The term "dog" is unmarked as to gender, but in the example cited above its gender is fixed for that context. Consider the context "_____ is warm-blooded." Anything filling the blank must belong to the category of mammals (or to the category of birds). The term "whale" probably would not be rated as belonging to the category of mammal to a high degree (it would certainly not be said to belong to the category of birds) and many speakers of English would probably consider it to belong to the category of fish to some degree. But in the context given here, its membership in the category of mammal would be fixed; that is, its sense would be fixed in this context.

³⁹ Contextually determined synonymy can also be used to illustrate the general principle that the same information may be conveyed in language either syntagmatically or paradigmatically. Consider the following four sentences:

- 1)a I'm flying to New York
- b I'm going to New York by air
- 2)a I'm driving to New York
- b I'm going to New York by car

1a and 1b are synonymous in the context where I will be a passenger in an air-borne vehicle. If the context indicates that I may be the pilot, we would expect that I would utter 1a and not 1b, although 1b would not be false. 1a simply gives more information in that context. 2a and 2b are not completely analogous to 1a and 1b. While I might state 1a even though I would not be pilot of the plane, it would be less acceptable to state 2a if I was not planning to drive the car. 1a and 1b are synonymous just in case there is no question of my piloting the plane; 2a and 2b are synonymous just in the case it is I who am driving the car. If I am not planning to drive, then 2a is not ambiguous, but false.

We should notice that if questions of truth-conditions are regarded as the only appropriate ones for semantics, then it will not do to consider synonymy as context-dependent. One can choose contexts so as to make words which are clearly different in meaning be interchangeable, *salva veritate*. For example, in speaking of a six-foot tall, dark-haired, blue-eyed man named Harry, we can say that the three adjectival phrases and any combination of them are all interchangeable, without change in truth value, in the following context: "Harry can be described as being _____. " And we certainly would not want to claim that we have even a limited synonymy in this case, as we do in the case of "dog" and "bitch." It is because Lyons is speaking of an interchangeability which preserves meaning (and therefore presumes at least an intuitive understanding of "sameness of meaning"), and not which preserves truth-value, that he can offer the suggestion that synonymy is context-dependent.

An extremely important structural relation is *hyponymy*, a taxonomic relation which is the reverse of *superordination*. We may say that if x is a kind of y then x is a hyponym of y (and conversely, y is a superordinate term with regard to x). Scarlet, for example, is a hyponym of red. Hyponymy is related to the formalized concept of "inclusion" in the logic of classes. But inclusion is appropriate only for extensions. Extensional classes are wedded to a theory of reference and we want hyponymy to hold for non-referring terms as well. Unicorn is a hyponym of mythical beast, although both terms have a null extension. Lyons defines hyponymy as unilateral or asymmetrical implication: "X is scarlet will be taken to imply X is red; but the converse implication does not generally hold" (*Theoretical Linguistics*, p. 455).

In regard to natural language it is important to note that hyponymy operates neither as comprehensively nor as systematically as it does in scientific taxonomies. There are gaps, asymmetries, and indeterminacies in lexical areas. Inattention to this fact will result in the construction of fields which are scientific taxonomies but disregard the fluidity of natural languages.⁴⁰

Lyons defines a number of exclusive relations. The basic criterion for the *incompatibility* of two terms is that if the terms were used in two otherwise identical sentences (with the proper modification for phonemic considerations), the two sentences would be contradictory. "Blue" and "green" are incompatible. Consider S_1 : I saw a blue house; and S_2 : I saw a green house. Assuming that the context indicates that only one monochrome house is described, it is clear that if I assert S_1 , then I cannot assert S_2 without contradiction. Incompatibility is importantly different from mere *difference of meaning*. Indeed one could say that two terms which are incompatible are often closer in meaning than two terms which are not incompatible.

Antonymous relations all involve different kinds of opposition of meaning. In *antonymy* properly so-called, the assertion of one antonymous term implies the denial of the other but not vice versa, e.g. good:bad.

⁴⁰

The anisomorphism between different natural languages, that is, the fact that for every term of a natural language it often is not possible to find a corresponding term in a second natural language, can be seen in cases where one language L_1 has names for all hyponyms of a term x in L_2 but has no superordinate term such that it translates x . The Greek term "*dēmiourgós*" has as its hyponyms "*téktōn*," "*iatrós*," "*aulētēs*," "*skutotómos*," "*kubernētēs*." These hyponyms may be translated by the English words: "carpenter," "doctor," "flute-player," "shoemaker," "helmsman"; yet English has no superordinate term for all of these.

The sentence "John is good" implies that John is not bad but "John is not bad" does not always imply that "John is good." *Complementarity*⁴¹ is defined as follows: the denial of one member of a complementary pair involves the assertion of the other and the assertion of one implies the denial of the other. If "John is single," then "John is not married," and if "John is married," then "John is not single."

While antonymies are gradable, complementarities are ordinarily neither gradable nor qualifiable. One can be partially good and partially bad, and something can be somewhat high, but one cannot be partly married and partly single, or slightly dead. At best, these latter expressions would need special interpretation to be intelligible.

Converse terms are ones such as buy and sell, husband and wife, parent and child. These are not complementary for it is not the case that if "I do not buy x from y" therefore "I sell x to y." Rather, as is the case with antonymy if "I sell x to y" then "I do not buy x from y." But converses, unlike antonymies, are not gradable.

In his most recent work, Lyons adds a number of binary oppositions to the three exclusive ones discussed above. He adds the distinction first drawn by Trubetskoy between *privative* and *equipollent* opposites. The first is an opposition between two terms: one is distinguished by a

⁴¹ Complementarity is a special case of incompatibility holding in lexical sets containing only two items, except, as Lyons says, dichotomization is itself a special principle in semantic structure. This may be illustrated in the case of color terms. We say that 'red' implies 'not blue' and 'not green' and . . .; and that 'not red' implies 'green' or 'blue' or In the case of two element sets the conjuncts or disjuncts collapse into one term, thus satisfying the above-stated condition for complementarity.

positive property and the other is opposed to it by virtue of the lack of the same property, e.g. animate and inanimate. The equipollent is an opposition between two terms, both with distinctive, but opposing positive features, e.g. male and female.⁴² The pair, male/female, are often used metaphorically and even mythologically to label many oppositions we would call equipollent, e.g. the Yin-Yang dichotomy. But the opposition between male and female is always somewhat ambiguous as to whether it is equipollent or privative, a feature, I believe, which is preserved in many metaphoric transfers.

Another type of opposition is one which Lyons calls *directional*, where *directional* is taken in a very broad sense to include changes of state as well as change of place. Lyons states:

Looked at from this point of view, arriving in Paris stands in the same relation to being in Paris, as getting married is to being married . . . and departing from or leaving Paris is in the same relation to being in Paris as dying is to living or forgetting is to knowing. (*Semantics I*, p. 281)

Regarded in this sense, directional opposition is at the basis of much lexical structure. It also provides an elementary example of the

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The examples are from Lyons and they are themselves revealing of the extralinguistic forces which sometimes invade considerations that are presumed to be purely semantic. Morphologically animate/inanimate would seem to indicate privative opposition. But certainly some ecologically-minded persons might object that the properties of being animate and being inanimate are distinctive beyond the presence or absence of life. More striking is the opposition between male and female. Throughout the written record of the thoughts of men there have been theses put forth which characterize the opposition between male and female as a privative one--a woman is a man *manqué*. The view that the opposition is an equipollent one has had an equally long history and has constituted a competing view. Given the public ideology of today, few would attempt to pronounce the male/female opposition a privative one, but this should not blind us to the fact that for many using the opposition, past and even present, it is the privative and not the equipollent opposition which they have in mind.

relational character of such standard metaphors as a "journey" to speak of death and of those (dead) metaphors which use change of place as metaphors for an epistemological change, e.g. I arrived at the idea.

Lyons draws a distinction between oppositions he calls *orthogonal* and *antipodal*. These are illustrated within the lexical set {north, south, east, west}. The antipodal contrasts are between north and south, and east and west. The orthogonal contrasts are between north and east; south and east, north and west, south and west. Antipodal contrasts are diametrically opposed to one another, while orthogonal contrasts need not be exclusive oppositions. Using our example, we can posit a point which is northeast but never a point which is north-south. Orthogonal and antipodal oppositions need not be spatial. The contrast in English between black and white is an antipodal contrast. The striking character of this antipodal contrast is preserved in the widespread metaphoric use of these opposed terms. Lyons tries to make the case that the contrasts in semantic fields of kinship words are often best seen in terms of orthogonal and antipodal oppositions (*Semantics I*, p. 284-286). The lexical set {spring, summer, autumn, winter} also illustrates that the question "What is the opposite of x?" has several answers depending upon the type of opposition one has in mind. Spring is the antipodal, while summer and winter are orthogonal oppositions to autumn.

A nonbinary contrast illustrated by the set {spring, summer, autumn, winter} is that of a *cyclical* set. A cyclical set is one in which "every lexeme is ordered between two others." This is in contradistinction to a *serially* ordered set (or field) in which "there are two outermost members (if the set is determinate) and all other lexemes in the set are ordered between two others" (*Semantics I*, p. 289). The field of season words is

determinate while the set of numerals is serially ordered, but *indeterminate* (i.e. it can be extended indefinitely). The serially ordered field of grading terms {excellent, good, fair, poor} is somewhat indeterminate because we could add terms on either end and in between the terms cited above, e.g. "superb," "awful," "very good," etc. The last two fields I have cited also exhibit the relation of ranking which I discuss below.

Among the serially ordered sets, there is a distinction to be drawn between progressions in the series which are stage-like and those whose terms denote continual accretions marked by a set of regular intervals. This distinction overlooked by Lyons will be discussed in Chapter 5 where it plays an important role in the metaphors analyzed there.

To the above enumeration of sense-relations we may add a number suggested by Lehrer (some of which are adopted by Lyons in his latest work). *Overlapping segments* is a relation which holds between sets of terms such as second, minute, hour, day, week, month, year, decade, etc. *Part of* is an inclusive relation like *hyponymy*, but unlike the latter it is not necessarily transitive.⁴³ *Part of* is probably a relation which covers a variety of different forms of connection between terms. The sense in which a fingernail is a part of a finger is very different from the sense in which a cell of epidermal tissue is part of a finger. *Overlapping segments* is one special type of the *part of* relation. Lastly, Lehrer adds *rank*

⁴³ In certain technical uses *part of* is always transitive; for example, in geometry, if a line segment AB is part of a line segment AC and AC is part of a line segment AD, then AB is part of AD. However, in many other uses *part of* is not transitive. For example, the retina is part of the eye and the eye is part of the face, but the retina is not part of the face. See Lyon's discussion of part:whole relations in *Semantics I*, pp. 311-317.

which describes the relation between such terms as general, colonel, major, captain, lieutenant, sergeant, etc. These terms are incompatible but like antonymies are scalar; that is, the incompatible terms are graduated, as in the case with hot, warm, cool, cold. *Rank* is a commonly transferred relation in metaphoric use: To call someone a "general" is clearly to place him at the highest rank of whatever his endeavor is. With rank, as with other scalar terms, the use of one term very often results in the productive device of similarly using the related scalar terms metaphorically. Thus if we call a head chef a "general of the kitchen," then we might call one of his sous-chefs a "lieutenant." This type of productive use of a semantic relation is not limited to scalar relations, but is most easily identified among such relations.

The various relations we have discussed are most likely only some of the paradigmatic relations which order semantic fields. Some relations, such as antonymy and part-of have turned out to be far more complex and far less homogeneous than we often assume they are. The difference between the account of sense-relations given by Lyons in his earlier work *Theoretical Linguistics* and his later book *Semantics I* indicates the evolution in thinking which has taken place in just ten years. I feel certain that once the notion of sense-relations as governing conceptually related terms becomes more widely employed, we will have a more adequate and more precisely delimited and defined set of paradigmatic relations.

The illustrations of semantic fields which follow incorporate some of the above sense-relations. The examples are taken from the work of Adrienne Lehrer. One of these fields

is that of cooking terms. The culinary field has as its basic words cook, bake, fry, broil, and, for some speakers, steam. Also included are simmer, stew, poach, braise, sauté, French-fry, deep-fry, barbeque, grill, and charcoal. Peripheral words include plank, shirr, scallop, flank, rissoler, steam-bake, pot-roast, and other compounds. Figure 1 represents the basic cooking terms and their relationships. Terms marked with subscripts have more than one sense in the same lexical field. That is, bake₁ is incompatible with cook₁ because bake₁ is reserved for that activity which has to do with breads and pastry. Both bake₁ and cook₁ are human activities whereas the other culinary terms are processes. Only cook₁ and bake₁ freely occur intransitively with human subjects. Cook₂ is that process which is the superordinate term for all the other terms given below it in the table, while bake₂ is what you do to various foods in an oven.

Figure 2 gives the taxonomic structure of the field of sound words: of its basic terms along with a subset containing terms denoting loud, unpleasant sounds. In this field we have in addition to the relations of hyponymy, incompatibility and synonymy, that of gradable antonymy.

Sense-Relations II: Syntagmatic Rule Relations

Except in the work of Porzig, early field theory and most contemporary field theory has focused largely on paradigmatic sense-relations. In the examples of semantic fields provided by Adrienne Lehrer's work we have sets of words related exclusively by paradigmatic relations. Although she acknowledges the fact of semantic relations realized along the syntagma, we do not yet have a formal means for specifying what these

<i>cook</i> ₁										<i>bake</i> ₁
<i>cook</i> ₂										
<i>steam</i>	<i>boil</i> ₁			<i>fry</i>		<i>broil</i>		<i>roast</i>	<i>bake</i> ₂	
	<i>simmer</i>		<i>boil</i> ₂	<i>sauté</i>	<i>deep-fry</i> <i>French-fry</i>	<i>grill</i>	<i>barbecue</i> <i>charcoal</i>			
	<i>poach</i>	<i>stew</i>								

Figure 1a

Synonyms appear in the same square. Incompatible terms are separated by vertical lines. Shaded areas indicate overlap. *Grill* is largely subordinate to *broil* (in American English), but there is some overlap with *fry*.

For some speakers, *steam* is included in *boil*₁

<i>boil</i> ₁		
<i>steam</i>	<i>simmer</i>	<i>boil</i> ₂

Figure 1b

(S.F. & L.S., p. 31)

<i>sound</i> = <i>noise</i> ₁			
(audible)		(inaudible)	
<i>loud</i> ←————→ <i>soft</i> = <i>quiet</i> ₂		<i>silent</i> = <i>quiet</i> ₁	
<i>noise</i> ₂		<i>hush</i> ₁ <i>mute</i> <i>still</i>	
<i>din</i> <i>racket</i> <i>clamor</i> <i>shrill</i> <i>screech</i> <i>deafening</i> <i>ear-splitting</i> <i>crash</i> <i>clatter</i> <i>rattle</i> <i>strident</i>		<i>resounding</i> <i>resonant</i> <i>sonorous</i>	
		<i>hushed</i> ₂ <i>muffled</i>	

Figure 2.

(S.F. & L.F., p. 40)

relations are. Lyons' work, similarly, details only paradigmatic relations. In a discussion of Porzig, however, Lyons notes the semantic import of such syntagmatic formations as "kick with a foot." McCawley, arguing that "kick" has as part of its meaning with a foot, has pointed out that it is worse than odd to say "I kicked him with my elbow."⁴⁴ Lyons suggests that a word such as "kick" involves a "lexicalization of this syntagmatic component [with a foot]" and proposes the term 'encapsulation' to cover such phenomena. He writes "The sense of 'with a foot' is encapsulated in the sense of 'kick,' as the sense of 'with the teeth' is encapsulated in the sense of 'bite.'" The notion of encapsulation which Lyons introduces seems to be related to the idea of selection restrictions which we will discuss below.

But there is still another way in which to talk about semantic relations which are realized along a syntagma.⁴⁵ Charles Fillmore in his case grammar ("The Case for Case" in Bach and Harms) and Terence Langendoen in his grammatical roles (*Essentials of English Grammar*) identify a number "pseudo-categories" for noun phrases in a sentence, or grammatical string, which mark certain relations between noun phrases and the verb. These are "pseudo-categories" because their status is in fact that of a relation rather than a category. The roles assigned to the noun phrases are adaptations of traditional cases.⁴⁶ Let us examine the following four sentences

⁴⁴James McCawley, "The Role of Semantics in a Grammar," in Bach and Harms, eds., *Universals of Linguistic Theory* (New York, 1968).

⁴⁵The following discussion is an amplification of an idea first presented to me in a personal communication with Adrienne Lehrer.

⁴⁶However cases, as manifest in a particular language, are surface structure phenomena, while the cases or roles used by Fillmore and Langendoen are meant to be understood as deep structure phenomena. Langendoen, in subsequent work, has repudiated the notion that roles are deep structure phenomena.

presented by Terence Langendoen in *The Essentials of English Grammar* (New York: Holt, Rinehart & Winston, 1970).

- 1) John sent the news to the Congressman by telegram
 x y z w
- 2) The Congressman received the news from John by telegram
 z y x w
- 3) The news reached the Congressman by telegram
 y z w
- 4) A telegram conveyed the news to the Congressman
 w y z

In each of the sentences the same nominal expressions (with the possible exception of John, see below) stand in the same semantic relation to the verb of the sentence, although they each occupy different grammatical positions in the various sentences. In each, the news is the object of the action, a role which, in grammars with a highly developed case structure, is usually designated as the dative case.⁴⁷ One can drop the case terminology altogether, as does Langendoen, and refer to the role played by the news in the above sentences as the 'Patient;' it 'suffers' the action of the verb.⁴⁸ The Congressman is the 'goal,' that is, that toward which the action of the verb is directed, in all four sentences. The 'instrument,' or means by which the action is carried out in each of the sentences is a telegram. John is the 'agent,'⁴⁹ the one by whose

⁴⁷ In the sentences (1), (2) and (4), the news is the direct object, though in (3) it is the subject. Here we see that the syntactic role of the phrase is not coincident with its semantic role, although the semantic relation is the one which is expressed by the position of the term in a syntagma.

⁴⁸ An alternative terminology, accompanied by a somewhat different theory is provided by Gruber's Thematic Relations, cited and used by Jackendoff (in *Semantic Interpretation in Generative Grammar*, (Cambridge: MIT Press, 1972)) Using Gruber's theory we would say that the news as the object of the action is the 'theme' of the sentence.

⁴⁹ Although the subject need not be the agent, e.g. Congressman in (2), it is usually the case that the agent takes the syntactic position of subject.

agency the action of the verb is performed, in (1). A role related to agent (which is more likely to occupy syntactic positions other than subject) is 'source.' In (2) John is the 'source.' Notice that 'agent' involves some intentionality, or potential for intentionality not required for the 'source.' A sheet of paper with confidential material on it left lying carelessly about might be the 'source' of a news leak, but it could not be the 'agent' of such a leak. Other grammatical roles which nominal expressions might play would be the 'result' of the action, the 'location' and 'direction.' While the number of roles must be rather small if they are to assume any theoretical importance in the structure of language, the ones cited here most likely constitute an incomplete inventory.

The semantic role relations occupied by a nominal expression and relative to some verb are what we will use to express the syntagmatic relations governing semantic fields. Fillmore and Langendoen use the case grammar to analyze the deep structure of specific sentences. I am using it as a means of specifying syntagmatic relations of a semantic field. As these relations pertain to the type of semantic connection between the noun phrases of a sentence and its verb, it may be appropriate to claim that these syntagmatic relations are operative in fields which are in some sense 'dominated' by a verb.⁵⁰ Color words, then, would not exhibit these syntagmatic relations. Although one can organize a set of verbs strictly according to paradigmatic sense-relations, one cannot organize a set of terms, none of which are verbs, using the syntagmatic sense-

⁵⁰ Ray S. Jackendoff, in *Semantic Interpretation in Generative Grammar*, in fact proposes that role relations, which he calls thematic relations after Gruber, should not be taken as the underlying deep structure of a sentence but should be incorporated in the semantic representation of verbs.

relations derived from case and role grammars.⁵¹

This is because the syntagmatic relations of a field indicate the basic underlying structure of sentences that can be formed in a given semantic field or indicate rules and relations specifying what collocations are possible given certain semantic considerations, i.e. the considerations which govern the constituents of a given field. For example, semantic considerations govern what elements are to be constituents of the semantic field of fishing, e.g. fisherman, angler, to fish, fishing, fish, trout, rod, net, etc. But these elements may relate to each other as alternatives in a grammatical string, e.g. fisherman, angler, or as elements in a collocation, e.g. "the fisherman fishes for trout." While paradigmatic relations specify which elements serve as alternatives for one another, and the nature of the alternation (i.e. synonymy or antonymy, etc.), the syntagmatic relations indicate how members of sets of alternatives (paradigmatic sets) collocate in a manner specific to the semantic character of the field. Thus the syntagma characterizing the role relations particular to a given field serves as a model, even a paradigm for other related syntagmatic formations of the field. Other sentences can be generated by replacing other items among the paradigmatic equivalents of each separate term, by adding elements from optional case relations and by syntactic transformations, involving such considerations as tense, modality, determinates, etc. The model syntagma, such as would be constituted by the string "the fisherman fishes for fish" in the case of the field of

⁵¹ I am not sure how to handle such collocations as 'blond hair' which seem to involve syntagmatic sense-relations and which do not involve a verb. Other modifying adverbs and adjectives are so related to nominal expressions, but aside from specifying selection restrictions or using the notion of "encapsulation" I do not know how to characterize what seems to be a syntagmatic sense-relation which involves only non-verbal expressions.

fishing terms, is only an abstraction, sometimes gotten by examining common usage, sometimes derived from more special and specific contexts. It is a skeletal structure consisting only of the syntagmatic relations around which the paradigmatic relations form the fleshed-out body and to which the syntactic rules of both deep structure and surface structure give life and motion. In my adaptation of role relations, these skeletal structures of fields are not sentences. In the way they are used here, the relations are to be distinguished from the base constituent (in transformational grammar) of a given sentence.⁵²

The syntagmatic relations in a field can then be represented as a syntagmatic chain, each element of which is a paradigmatic set of alternatives: under each role or category, we can place not a given term in a sentence, but the set of terms which have paradigmatic relations such that they would be substitutable for one another in a given sentence modelled after the syntagma indicated by the field.

At this point we may clarify the interaction between paradigmatic

⁵²The role relations, as they pertain to sentences rather than to the skeletal syntagma of a semantic field, are considered by some to be more basic than the noun phrase/verb phrase structure of sentences. The question then arises whether the role relations which noun phrases bear to the verb of the sentence should be considered to be at the base in a transformational grammar. Fillmore clearly takes this view. Langendoen, in *Essentials of English Grammar*, takes a similar view. For Jackendoff, however, thematic relations are assigned by the semantic component to the output of a Chomskian deep structure. The controversy, which is generally around the question of the semantic component, need not concern us here, and the fact that Fillmore and Jackendoff each use the syntagmatic relations although they portray the mappings differently indicates that the direction of the mapping is quite independent of our purposes (I owe this point to Adrienne Lehrer). My point requires only that there are syntagmatic considerations, that is questions of collocatability, which are intimately related to the semantic properties of sets of words.

and syntagmatic relations which organize a semantic field. The examples of semantic fields which we have seen in the previous sections have been constructed around two considerations, the lexical items and the paradigmatic sense-relations which obtain between them. If we view each consideration as a dimension of semantic fields, we can say that the semantic fields portrayed in figures 1 and 2 are two dimensional, that is, they consist of a set of lexical items which can serve as alternatives in a semantic string, and those sense-relations which indicate the nature of the alternation. By arranging such sets of alternatives, each of which is conceptually related with regard to the collocatability of its elements, in a syntagmatic chain and by specifying the syntagmatic role relations which the sets of nominal expressions bear to the verb (or set of verbs) to which they are conceptually related, we get a field which can be described as having a third dimension. This third dimension, which brings together and orders a number of two dimensional semantic fields is the set of syntagmatic sense-relations such as the role relations provided by Langendoen and Fillmore.

Notice that a field organized in this way will also provide those terms which are semantically related but belong to different grammatical paradigms and thus could not be represented together in a two dimensional field. Lehrer has presented this type of information for a subset of sound words in Figure 2a below. Allowing for semantically related words along a syntagma to be represented in a semantic field permits us, incidentally, to encompass the various paradigmatic categories so that when we move from one part of speech to another (for example, from a noun to a verb, from resonance to resonate) we have not thereby moved from one

semantic field to another.

Figure 2a

Noun	Verb	Adjective	Adverb
<u>sound</u> <u>noise</u> ₁ <u>noise</u> ₂	to make a _____ to make _____ <u>hear</u> / <u>*aud</u>	<u>soundless</u> <u>noisy</u> <u>audible/inaudible</u> <u>*hearable</u>	<u>noisily</u> <u>audibly</u>
<u>loudness</u> <u>softness</u> <u>stillness</u> <u>quiet</u> <u>silence</u>	<u>still</u> <u>quiet</u> <u>silence</u> } = to make { <u>still</u> <u>quiet</u> <u>silent</u>	<u>Loud</u> <u>soft</u> <u>still</u> <u>quiet</u> <u>silent</u>	<u>loudly</u> <u>softly</u> <u>quietly</u> <u>silently</u>
	<u>hush</u> <u>mute</u> <u>muffle</u> } = to make { <u>hushed</u> <u>mute, muted</u> <u>muffled</u>	<u>hushed</u> <u>muted</u> <u>muffled</u>	<u>in a _____</u> <u>manner</u>
<u>din</u> <u>racket</u> <u>clamor</u> <u>rattle</u> <u>clatter</u> <u>crash</u>	? <u>clamor</u> <u>rattle</u> <u>clatter</u> } = to make a _____	? <u>rackety</u> <u>clamorous</u> <u>clattery</u>	<u>clamorously</u>
<u>resonance</u> <u>sonority</u> <u>stridenes</u> <u>shrillness</u>	<u>resonate</u> <u>deafen</u> = make <u>deaf</u> ? <u>split ears</u> = to make ears <u>split</u> <u>resound</u>	<u>resonant</u> <u>sonorous</u> <u>deafening</u> <u>strident</u> <u>shrill</u> <u>ear-splitting</u> <u>resounding</u>	? <u>resonantly</u> <u>sonorously</u> <u>deafeningly</u> <u>stridently</u> <u>shrilly</u> <u>resoundingly</u>

(S.F. & L.S., p. 36)

Semantic Fields and Signification

We ought now to inquire if other factors need to be considered, that is, whether more dimensions need to be added in constructing semantic fields so that they will provide us with the sense of their constituent terms.

While the tables in figures 1 and 2 show the basic organization of two semantic fields, the culinary field and a subfield of sound words, we see that without already knowing the meanings of the lexical constituents, we could not know the significance of these tables. Even if we knew that in Figure 1 the terms cover the culinary field, we could only learn that certain words contrast, but not the way in which they contrast. In other

words, semantic fields do not provide us with a term's signification. But they do provide us with its value. The fact that English contains the term silent, or some synonym thereof, affects the ground covered by the antonymous pair loud, soft. If the term broil were deleted from English while the culinary practice continued, the values of the adjacent terms, such as fry, grill, roast, would be altered so as to allow speakers to refer to this cooking process.

A good illustration of the interrelationship between value and signification and their relation to field analysis is afforded by color terms. They are a useful example because it appears that there are no perceptual differences among the speakers of the various languages and because the field of color is a continuum which can be variously apportioned by a language. In the culinary field, if a language fails to have a term for sauté, it is easy enough to imagine that the culture simply has no procedure in its culinary repertoire to warrant such a term; whereas if a language has no term for green, it is fair to assume that speakers of that language still have that perceptual stimulus and that they can use their color terms differently so as to be able to speak of such a stimulus. The study of color terms by Berlin and Kay indicated that there are a number of focal points which remain fairly constant as the reference of the basic color words in any given language. If a language possesses a name for one of the eleven basic incompatible color categories uncovered by Berlin and Kay,⁵³ then speakers of that language will identify the same color chip

⁵³ In the Berlin and Kay study, whose data included color terms in ninety-eight languages distributed over a wide variety of linguistic families, eleven basic color categories emerged. The presence of terms for these colors in a language was restricted by the following rule(s):

1) No language has only one color term,

(or a near approximation) to be the reference of that color term, as will speakers of another language which also have a term for that color. However the value of a given color is different in a language which has, let us say, only two color terms and in one that has, let us say, eleven color terms. To illustrate, we will say that in language A there are only two contrasting color terms, one for black and one for white, while language B contains all eleven basic color category terms. Both the speaker of A and the speaker of B will agree on where the foci of black and white are to be located on a given color chart consisting of chips of graduated hues and brightness. Language A has no term for that category of hues termed "green" in B and might classify some shades of green as black and others as white. But this is now a difference in signification; one which is due only to a difference in the value of the terms for black and white in A and in B, since in B the term for green contrasts with the terms for black and for white, while in A the terms for black and for white contrast only with each other. The fact that the terms for black and

⁵³(cont.) -

- 2) If a language has only two terms, those two terms refer to BLACK and WHITE
- 3) Additional terms appear in the following order:

$$\begin{bmatrix} \text{WHITE} \\ \text{BLACK} \end{bmatrix} < [\text{RED}] < \begin{bmatrix} \text{GREEN} \\ \text{YELLOW} \end{bmatrix} < [\text{BLUE}] < [\text{BROWN}] < \begin{bmatrix} \text{PURPLE} \\ \text{PINK} \\ \text{ORANGE} \\ \text{GREY} \end{bmatrix}$$

"For distinct color categories (a,b) the expression a<b signifies that a is present in every language in which b is not present." And where colors are enclosed in square brackets we have an equivalence class such that a language which has all the preceding colors might have either color of the equivalence class. For example, if a language has four basic color terms, then the rules predict that those colors will include, white, black, red and either green or yellow; if the language has five terms then it will have both green and yellow as well as white, black and red; if a language has six color terms then it will have those of a five color term language and blue.

white in both A and B signify the same perceptual points as the foci of the respective references underscores the fact that the difference in signification regarding the category of green color is essentially a difference in value.

Semantic Components

Although the fields given in Figures 1 and 2 do not tell us in what way the various terms contrast, and although they provide us not with signification but the values of a term, the signification can be provided through a complementary analysis. And such an analysis can be carried out in a relatively formal way using the notion of semantic components.

A semantic component is a construct used to represent the concepts⁵⁴ which in some complex arrangement constitute the sense of a lexical item. Certain semantic components provide the conceptual content of a word. These are generally called semantic features or markers. In some accounts

⁵⁴In order to facilitate the account of metaphor I shall consider semantic markers to be concepts. This is the view adopted by Katz, Fodor and Postal. See J.J. Katz, *Semantic Theory* (New York: Harper & Row, 1972), J.J. Katz and J. Fodor, "The Structure of a Semantic Theory," *Language* 39 (1963), and J.J. Katz and P. Postal, *An Integrated Theory of Linguistic Description* (Cambridge: MIT Press, 1964). In the text above I shall only discuss the latest version of the theory originally put forth by Katz and Fodor, that is, the theory as it appears in Katz's latest work. My own view differs from Katz's in that I understand "concept" somewhat differently. See p. 101 below. Other writers, for example Uriel Weinreich, insist that semantic components are merely lexical items like the lexical items they compose. See U. Weinreich, "Explorations in Semantics," T. Sebeok, ed. *Current Trends in Linguistics III* (The Hague: Mouton, 1966). Bierwisch, in "On Classifying Semantic Features" (Steinberg and Jakobvits, *Semantics*, 1971) has suggested that semantic features be regarded as predicates as in predicate logic, with n-arguments. Frege regarded a concept as that which a predicate names, and as being incomplete in the same way in which functions and predicates are incomplete, that is, in containing within it some variables which are mere place holders. Bierwisch's view then brings "semantic features" even closer to what Frege meant by a concept.

these are accompanied by a '+' or '-', e.g. [+Animate], [-Animate].⁵⁵ Other components concern the combinatory or syntagmatic aspect of the semantics of the word and are called selection restrictions or transfer features.⁵⁶ Selection restrictions serve to indicate the sorts of words with which a given word can collocate without semantic anomaly. If a term has a selection restriction <R> then it can collocate with terms which have among their semantic markers [R]. A term may have a number of selection restrictions each governing the different grammatical categories and subcategories with which a term may combine. Thus a verb such as chase will have <HUMAN> v <ANIMATE> as a selection restriction for the subject variable and <OBJECT> for the direct object variable, thus marking:

S1 The blackboard chased the yellow
as semantically anomalous.^{57,58} Selection restrictions will play an important role in our consequent discussion of metaphor.

⁵⁵ The negative sign is problematic in that it is sometimes used to convey the presence of a contrary feature [-Masculine], and at other times the absence of the feature.

⁵⁶ In Katz's account we have, in addition, distinguishers which serve to indicate the purely perceptual content of a lexical item.

⁵⁷ Generally, the sorts of things that are called selection restrictions in Katz's account are transfer features in Weinreich's theory. However, Weinreich claims that these features are transferred to the terms which collocate with the words in question. Thus in our example, "blackboard" receives the feature [+Animate] and "yellow" the feature [+Object].

⁵⁸ An extremely important part of the componential theories we have been discussing is their attempt to integrate semantic theory with the theory of transformational grammar. Katz uses a projection rule which tells us how the semantic component of language is projected onto the grammatical deep structure of a sentence. Weinreich uses a device he calls the Semantic Calculator and rules concerning relations he calls "linking," "nesting," "ranking," and so on, which describe the way in which semantic components combine. For our immediate purposes, these syntactic considerations, though indispensable for an adequate semantic theory, can be put aside.

The view that the meaning of a word can be represented as a set of components can mistakenly be regarded as yet another theory in which meaning is conceived of as an isolated entity atomistically apportioned to each word.⁵⁹ The criticism seems justified when we see a semantic representation such as: "father" [(Human) & (Male) & (Adult) & (Ancestor) & (Lineal)], for that entity enclosed in the square brackets is given as the meaning of the word "father." What needs to be kept in mind is that the semantic markers are rather like the coordinates of a map. A given lexical item is conceived of not as having its own distinct meaning, separable from other words (and thus separable from the way in which a word is used), but as being composed of semantic markers which are meant to exhibit the systematic interconnections between the different elements of the lexicon. That "mother" has the same markers as "father" except for the one relating to sex indicates the connection between these two words--that they are close in some posited semantic space which provides the concepts, the coordinates which will result in the meanings of words. In one sense it is true that componential theories are subject to the criticism Wittgenstein made of other theories: "Here is the word, there is the meaning. The money and the cow you can buy with it."⁶⁰ But like money, the word does not have value to buy anything without the systematic interconnections of which the semantic markers are only indicators. The metaphor is instructive, apparently for Wittgenstein

⁵⁹ See for example, Cecil Brown, "Semantic Components, Meaning and Use in Ethnosemantics," *Philosophy of Science* 43 (1976), pp. 378-395.

⁶⁰ Wittgenstein, *Philosophical Investigations* (Oxford, 1953), p. 49a.

himself. He wrote, as a parenthetical remark to the one cited, "But contrast: the money and its use." This is reminiscent of Saussure's analogy of money and words. Perhaps the same or similar consequences can be extracted from Wittgenstein's views.⁶¹

Before we admit semantic components into our modified semantic fields we need to raise a question concerning the status of these components. If components are concepts, then we face the problem of individuating bare concepts, concepts not embodied in a word. If the components are lexical items such as the words of which they are representations, then a dictionary composed of such entries would be circular. For reasons largely motivated by the conception of a semantic field as composed of a lexical field covering a conceptual field, it seems preferable to regard components as concepts. But I depart from Katz's position in that I do not regard these concepts as independent of some articulation in a language. I therefore view these concepts as "formed content." In order to better understand what I mean by "formed content," consider the following: If we have two sign systems L_1 and L_2 (or finite subsystems of two infinite sign systems) that are isomorphic and articulate the same conceptual domain, then these could be represented by the same componential and field analyses. For any given term t_1 in L_1 we could find a term t_2 in L_2

⁶¹ A similar objection is raised by David Lewis to what he calls Markerese. See D. Lewis, "General Semantics," in D. Davidson and G. Harman, eds. *Semantics of Natural Language* (Boston, 1972), pp. 169-218. He claims that semantic markers merely offer a translation, a peculiar one at that, and do nothing to explicate semantics. A translation, however, presumes a parity between forms L_1 and L_2 such that if L_1 is used to talk about C, L_2 can be substituted for L_1 . But on Katz's view, semantic markers cannot be a language because they do not have an independent level of expression: the written form [Human] insofar as it is a marker (as is indicated by the brackets) is distinct from that form in any language.

so that both have as their content the same concept or concatenation of concepts. This content would be formed content, and it would be the same formed content although it had two different forms of expression. It would remain the same formed content because the two articulations which the conceptual domain received were isomorphic. Given a third sign system L_3 which was not isomorphic to L_1 and L_2 but which articulated the same conceptual domain, then, to the extent that L_3 was anisomorphic to L_1 and L_2 , we could not find a term t_3 which had the same formed content as t_1 and t_2 .

"Formed content," then, is not identical to the term of which it is the content, nor is it independent of the articulation which is given to the conceptual continuum. As "formed content" there is no difficulty in individuating concepts, for they are the formed content of some lexical item.⁶²

The Relationship between Field Theory and Semantic Components: Expanding the Theory of Fields

Earlier I suggested that for each consideration of the composition of semantic fields we posit a "dimension" of that field, so that the lexical items themselves constitute one dimension, the paradigmatic values constitute a second dimension, and where appropriate, the syntagmatic values constitute a third dimension. Now I will postulate a fourth

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In the above discussion it must be kept in mind that I am adopting the Saussurian view of a concept as an intersubjective psychological entity. Katz is doubtless working with a Fregean view of concept. As such our two views are not so much in conflict as they are incommensurable. See the earlier discussion concerning the psychological thesis of Saussure.

dimension in which we consider the semantic markers of the lexical items held in common and those which differentiate the elements of the field. This 4-d field would then not only tell us that boil and fry are related as incompatible hyponyms of cook, but also inform us that the incompatibility is in virtue of the feature coordinates [Water] and [Oil]; simmer and boil₂, which are incompatible hyponyms of boil₁ with regard to the antonymous set of features [Cooking action_{fast}] and [Cooking action_{slow}]; and so on (see Figure 3 below). Additionally I will posit a fifth dimension in which selection restrictions will serve as the parameters. This fifth

Figure 3

	Conducted (oven)	Radiated (fire)	Hot surface (pan)
+Water -Oil	<i>boil</i> [-Vapor] <i>steam</i> [+Vapor]	<i>boil</i> <i>steam</i>	<i>boil</i> <i>steam</i>
+Oil -Water	(oven-fry)	-	<i>fry</i>
-Water -Oil	<i>bake</i> <i>roast</i>	<i>broil</i> <i>roast</i>	-

(S.F. & L.S., p. 100)

coordinate would group words in a field according to common selection restrictions, just as the semantic feature coordinate would organize the terms of the 4-d field around the presence or absence of a particular marker. Thus in the fifth dimension, carafe, canteen, decanter, flask would not only be some of the incompatible terms which are hyponyms of bottle, but would also be marked as having a common selection restriction <Liquid>.⁶³

⁶³ Notice that the selection restriction for bottle is not <Liquid>. We can speak without oddity of "a bottle of gas" as in bottled gas. The restriction on bottle is rather <-Solid> or <Liquid> v <Gas>. See Figure 5.

One may be able to specify the members of a given semantic field in terms of the semantic features held in common, or alternatively in terms of the selection restrictions held in common. An early, cursory attempt to integrate semantic components and semantic fields in this way was made in an article by Manfred Bierwisch, "Semantics." He writes:

By redefining this conception [that of Trier] in terms of semantic components, we might indicate precisely the organization of particular fields and the relations among their members.⁶⁴ (p. 170)

He suggests that a field may be constituted by lexical entries (in a dictionary) which have a common configuration of components. For example, the semantic field of kinship terms is marked by the shared features [Animate], [Human], [Relative]. There are then subfields, e.g. male relatives, or lineal (vs. collateral) kinship, as well as more inclusive fields, e.g. that of social roles, of which the kinship terms form a subset. Bierwisch also proposes that fields may be formed by groups of words which all have a feature which relates them to some other feature, as in part-whole or hyponymic relations. For example, "arm," "hand," "finger," all denote parts of the human body and must contain some component which will relate them appropriately to other terms which contain the feature [Human]. Finally verbs such as "talk," "think," "dream," form a field insofar as they are activities carried out by humans, that is, they are verbs which have as a selection restriction on the subject of the verb, the feature <Human>.

This presentation makes it appear as if lexical fields presuppose semantic components; it is, however, equally true that components pre-

⁶⁴Manfred Bierwisch, "Semantics," Lyons, ed. *New Horizons in Linguistics* (Middlesex, Eng.: Penguin, 1970), pp. 166-184.

suppose a lexicon which is structured in terms of fields.⁶⁵ That is, the organization of words in a field can be the basis for a componential analysis of these terms.⁶⁶ See figures 4 and 5.

In order to clarify the possibilities for integrating components and fields, I want to simplify and make more formal the first of Bierwisch's proposals. I will introduce the notion of a "degree" of a field. Let us assume that the semantic representation of a word can be given as a conjunction of simplex⁶⁷ semantic features. And let us consider a semantic field to be constituted by lexical items containing common semantic features. A field would then have a degree n, where n is the number of common semantic features. But as simplex features must be the most general sorts of concepts (perhaps [Entity] might be sufficiently unanalyzable to be a simplex marker), fields of a low degree would be extremely large, unwieldy and generally uninteresting. One

⁶⁵ Lehrer points out that Katz is implicitly using aspects of field theory in analyses such as the following:

The semantic marker (Activity) distinguishes 'chase' in the intended sense from state verbs, such as 'sleep,' 'wait,' 'suffer,' 'believe,' etc., and from process verbs, such as 'grow,' 'free,' 'dress,' 'dry,' etc. and classifies it together with other activity verbs, such as 'eat,' 'speak,' 'walk,' 'remember,' etc. (Activity) is qualified as to its nature by the semantic marker (Physical). This indicates chasing is a physical activity and distinguishes 'chase' from verbs like 'remember' and 'think' which are appropriately qualified in their lexical readings to indicate that thinking and remembering are mental activities. (Quoted in Lehrer, *S.F. & L.S.*, pp. 53-54)

⁶⁶ This procedure is often followed in ethnosemantics. See F.H. Bendix, *Componential Analysis of General Vocabulary: The Semantic Structure of a Set of Verbs in English, Hindu and Japanese*. (Bloomington: Indiana University Press, 1966).

⁶⁷ The simplex markers are the primitive unanalyzable concepts from which the complex markers are built up.

Figure 4
(S.F. & L.S.)

	American usage	Scottish usage
<i>cake</i>	+sweet +raised -yeast +soft ±individual	+sweet +raised -yeast +soft ±individual
<i>cookie</i>	+sweet -raised -soft (sometimes +soft) +individual	(not commonly used)
<i>biscuit</i>	-sweet +raised -yeast +soft +individual	+sweet ¹ -raised -yeast -soft (+crispy) +individual
<i>cracker</i>	-sweet -raised -soft (+crispy) +individual	(not commonly used)
<i>roll</i>	±sweet +raised +yeast ±soft (soft or hard) +individual	-sweet +raised +yeast +soft +individual
<i>bun</i>	±sweet +raised +yeast +soft +individual	+sweet +raised +yeast +soft +individual
<i>bread</i>	-sweet +raised +yeast -soft -individual	-sweet +raised +yeast +soft -individual
<i>scone</i>	(not commonly used)	-sweet +raised -yeast +soft +individual

Figure 5
(S.F. & L.S.)

	Water	Oil or fat	Vapor	Amount of liquid	Kind of source of heat	Cooking action	Special utensil	Special additional purpose	Cooking speed
<i>boil₁</i>	+	-	-						
<i>boil₂ (full)</i>	+	-	-			[Vigorous]			
<i>simmer</i>	+	-	-			[Gentle]			
<i>stew</i>	+	-	-			[Gentle]		[To soften]	[Slow]
<i>poach</i>	+	-	-			[Gentle]		[To preserve shape]	
<i>braise</i>	+	+	-	[Small]			(Pot with lid)		
<i>steam</i>	+	-	+				(Rack, sieve)		
<i>fry</i>	-	+	+				(Frying pan)		
<i>sauté</i>	-	+	+	[Small]					[Fast]
<i>French fry</i> <i>deep fry</i>	-	+	+	[Large]					
<i>broil</i>	-	-	+	*	[Radiant]	*			
<i>grill</i>	-	-	+	*	[Radiant]	*	(Grill, griddle)		
<i>barbecue</i> <i>charcoal</i>	-	-	+	*	[Radiant (Hot coals)]	*			
<i>bake</i>	-	-	+	*	[Conducted]	*	(Oven)		
<i>roast</i>	-	-	+	*	[Radiant or Conducted]	*			

might decide that only fields above a certain degree have some potential for exhibiting interesting features, and for actually characterizing the way in which speakers organize conceptual domains. For this reason, one might even refuse to call fields of a degree lower than some specified n, "fields" at all, coining another term, let us say "super-field" to designate these fields of low degree, while calling fields of a high degree "proper fields." Such a distinction permits us to define fields in terms of features and yet to distinguish those fields which will yield interesting semantic consequences from those which will not. It will also turn out to be very useful in speaking of fields as they pertain to metaphor. I will claim, for instance, that one cannot use one term from a field as a metaphor for another constituent of that field. "Knife," for example, would never be used as a metaphor for "fork." Someone can respond that it is perfectly acceptable to use "sheperd" as a metaphor for savior, and yet both sheperd and savior have the common semantic marker [Human], all the markers which are generated from [Human] by redundancy rules,⁶⁹ and some more specific markers dealing with the responsibility for the well-being of other beings. Indeed, one can claim, all metaphor is based on some common semantic features and therefore my definition of a field and the assertion that metaphors are not formed within a field are incompatible statements. However, if we distinguish between fields according to their specificity, that is, whether they constitute super-

⁶⁹ The componential theories require redundancy rules, so that each dictionary entry is not extremely large. The feature [Animate] is itself a complex feature which can be decomposed as [Physical], [Alive], etc. The feature [Physical] can be decomposed as [Object], [Solid], etc. An item in the vocabulary, then, does not need to include all those features which are contained in the feature [Animate]; the redundancy rules generate these features as required.

fields or proper fields, then the fact that two terms have a feature in common would not be sufficient for them to belong to the same proper field; thus the statement that metaphors are not formed within fields may be more precisely stated as the fact that metaphors are not formed between one proper field and another.

Our assignment of degrees to fields such that they could be classed as either superfields or as proper fields was based on the assumption that all features could be reduced to simplexes and that features are merely conjoined. Both these premises are problematic. Certainly it is in practice untenable to reduce all complexes to simplex concepts. No one is even clear on what a single simplex might be. Nor is it inconceivable that a dictionary assigning semantic components to lexical items is, like an ordinary dictionary, circular, i.e., without simplexes. Our ordinary dictionary has no simple terms; one term is defined by means of another. But it is the immense semantic territory encompassed by the resulting circle and the occasional grounding in the referential that makes this circularity non-vicious.

Moreover, that features are not merely conjoined is agreed by all, although there is much disagreement on the manner in which they are combined.⁷⁰ The matter is further complicated by the suggestion that not all features have the same status. Bierwisch, in a later article,⁷¹ suggests classifying semantic features into those which are predicative

⁷⁰ Weinreich suggests such relations as linking, nesting, ranking. Katz uses logical constants and bracketing.

⁷¹ Bierwisch, "On Classifying Semantic Features."

and those which are delimiting. Others have discussed whether or not features ought to be divided into those which are used assertively and those which are used presuppositionally.⁷² Empirical evidence supports the view that not all markers have an equal status in a word's semantic representation. Word association studies indicate that markers may be hierarchically ordered.⁷³ Lehrer, in attempting to resolve the difficulties encountered in trying to determine analyticity using semantic components and in wanting to do justice to the fluidity of a word's meaning, introduces the distinction between obligatory and optional components. Optional features are those which are often but not always thought to belong to the meaning of a word. If we consider only obligatory features as appropriate for a semantic analysis we find that we do not have enough information to differentiate among many members of a field. An examination of a set of words with markers divided into optional and obligatory will show this. Figure 6 shows the set of container words with their components. I will use this division among components to explain the difference between metaphor and catechresis.

The above considerations make it very complicated to specify a "proper field." Yet even if we consider that at least in practice we will always be encountering complex features, it seems apparent, from the illustrations we have seen of semantic fields, that elements of a field

⁷² See C. Fillmore, "Types of Lexical Information" and T. Langedoen, "Presupposition and Assertion in the Semantic Analysis of Nouns and Verbs in English," both in Steinberg and Jakobvitz, eds. *Semantics: An Interdisciplinary Reader in Philosophy, Linguistics and Psychology* (Cambridge, 1971).

⁷³ See H. Clark, "Word Associations and Linguistic Theory," in Lyons, ed. *New Horizons in Linguistics*.

Containers

Figure 6.

(S.F. & L.S.,

pp. 85-86.)

pot:⁸ {Earthenware}
bottle: {Narrow neck} {For something pourable {Liquid}}
carafe: {Narrow neck} {For serving beverages} {Glass}
canteen: {Narrow neck} {For drinking} {Metal}
flask: {Narrow neck} {Glass v Metal} {Liquid v Gunpowder}
decanter: {Narrow neck} {For liquids {Alcoholic beverages}}
 {For pouring v decoration}
pitcher: {Shape: with lip, handle} {For pouring liquid}
jar: {Wide neck} {Glass} {With replaceable lid} {For storing
 {solids, esp. food}}
jug: {Narrow neck} {Earthenware v Glass} {Handle} {Storing
 {Liquids}} {Large (Norm: Vessel)}
cup: {Shape: ..., handle} {For drinking}
glass: {Glass} [{For drinking} v {Cylindrical}]
vase: [{For flowers} v {Decoration}] {Glass v Earthenware}
urn: 1) {Earthenware} {Storing Ashes v Decoration}
 2) {With spout} {For pouring Coffee} {Metal}
tub: [{Large} v {Oval v Round}] {For washing}
can: {Metal} {For preserving {Food}} {Sealed lid} {Cylindrical}

tin: 1) = can, especially in British usage
 2) {Metal} {With replaceable lid} {Cylindrical v
 rectangular}
pail: {Shape: Cylindrical, open top, handle...}
bucket: = pail (Dialect and idiolect differences may require
 additional markers)
tank: {For storing v transporting {Liquids}} {Large (Norm:
 Container)}
cistern: {For collecting liquids {Water}} {Made of cement}
drum: {Cylindrical} {For storing v transporting} {Large (Norm:
 Container)}
vat: {Large (Norm: Container)} [{For fermenting} v {Storing
 {liquids}}]
bowl: [{For eating from v food preparation} v {Shape: Half
 spherical}] {Utensil}
tureen: {For soup} {Large (Norm: bowl)} {For serving} {Glass v
 Earthenware}
cask: {Barrel-shaped} {Large (Norm: Container)} {For Alcoholic
 beverages} {Wood}
barrel: [{Wood v Barrel-shaped}]
keg: [{Barrel-shaped v Wood}] {Small (Norm: Barrel)}

share a number of semantic features such that they may all share only one component but will also share jointly some disjunctive set of markers. Thus we can still distinguish superfields from proper fields such that superfields are those in which members share only few and relatively general (and hence relatively simple markers), that is, those markers which most often are generated by redundancy rules. Further research may indicate that it is the structure of a lexical entry, that is the arrangement and ordering of semantic features within a semantic representation, which is a critical factor in determining which items fall into which proper fields.⁷⁴

This attempt to specify a field in terms of the semantic components of the constituents of the semantic field, and the apparent dependency of componential analysis on fields suggest that perhaps these two approaches are equivalent. If we take fields to include only the first three dimensions specified above, that is the lexical items and their paradigmatic and syntagmatic values, then such a reduction would need to take place on three fronts: it would have to be possible a) to derive all the semantic features for a given sense of a term from its field; b) to pick out the members of a field by examining the components of lexical entries; and c) to derive the semantic relations governing terms as they organize a field from a componential analysis of the constituents of a field.

⁷⁴This may be what Katz has in mind when he writes that fields are composed of a number of terms with the same "general formal structure," such that the different terms may "vary in formal structure . . . but in ways that leave the basic structure of those readings intact" (*Semantic Theory*, p. 346). Unfortunately, there is so much disagreement and tentativeness as to what constitutes a "formal structure" and so little data in terms of descriptive semantics, that it is probably futile to attempt a general formulation along these lines.

It is easily seen that the first condition cannot be met. For while one can claim that given a hierarchical organization of a field, the superordinate term can serve as a marker for its hyponyms, the incompatibility relation among the hyponyms yields no such differentiating markers. The second condition may be satisfiable, but only given a simple account of how semantic features are organized within a lexical entry. The third condition also cannot be met, given the current development of componential theories. Some relations, such as synonymy, can be easily defined componentially. Two words are synonymous if they contain all the same components. However the componential analysis of words which are gradable antonyms are apparently quite problematic.

Although field analysis and componential analysis are not equivalent, we can say that they are complementary in much the same way in which value and signification are complementary. Then, if fields give us the paradigmatic and the semantically salient syntagmatic value of a term, it seems natural to say that signification is given by the components of a term. If we agree to call the combination of value and signification, "sense," where sense is opposed to reference, then we can also say that a word's sense is given when we have located it within a field and given it a componential analysis. By incorporating semantic components into an expanded conception of a semantic field, we gain the following: 1. an approximate means by which to specify a 2-d or 3-d field, that is in terms of components held in common in a proper field, 2. a means by which to clarify the content of a conceptual field, that is the conceptual field covered by a lexical field is given by the semantic features which define

and differentiate the lexical constituents, and 3. a basis by which to claim that the sense of a term, its meaning, is given by the semantic field to which it belongs.

Now we can say that if metaphor is a transference of meaning, then it is a transference from one semantic field to another. Moreover, we have shown what these semantic fields look like. We have specified their constituents, lexical items and semantic components or concepts, enumerated some of the relations which hold between these constituents, both as they serve as sets of alternatives in a grammatical string and as they relate to each other semantically within a grammatical string.

This then will constitute the linguistic base upon which to build a theory of metaphoric meaning. We must now ask how these semantic fields relate to one another in perspectival interaction. To this end we will introduce the notion of a connotative semiotic in the following chapter.

Chapter III

The Structure of Metaphor

In the last chapter we approached the question of the meaning of a metaphor by asking what it is that we want to specify as meaning, whether it be of a metaphorical or a non-metaphorical utterance. But now we need to ask questions concerning a metaphorical utterance per se.

Intuitively we may all feel confident that we can distinguish a metaphorical from a literal sentence and similarly distinguish a word used metaphorically from one used improperly. But by what criteria do we thus distinguish metaphor? Can we state necessary and sufficient conditions which an utterance must meet for it to be a metaphor? Similarly, we have an intuitive sense of how to interpret all but the most obscure metaphors. But is there a linguistically specifiable procedure by which such interpretation takes place, one analogous, perhaps, to the transformations outlined by generative grammar applicable to literal sentences? Finally, I have spoken of metaphors as having a cognitive meaning not reducible to the cognitive meaning of a literal paraphrase. I do not want to say that there are two distinct senses of meaning--one applicable to metaphor and another applicable to literal language, akin to but not coinciding with, let us say, the distinction between emotive and cognitive meaning.¹ It seems to me that if it is possible to account for the meaning of a metaphorical utterance using the same notion of meaning that we use for non-metaphorical utterances,

¹ One may wish to speak of an additional emotive meaning of metaphor, but this does not concern me since my interest here is in metaphor's conceptual, not emotive, force.

then we have an appropriately unified theory. And insofar as metaphor is not an incidental element in our ordinary discourse suitable primarily for rhetorical and poetic language, but an integral part of our daily discourse, its meaning should, if possible, be integrated into a general theory of meaning. It is for this reason that I have considered it apt and appropriate to include the previous chapter in which I developed the semantic framework for metaphor.

But if we are to understand meaning in the case of a metaphorical utterance in the same sense as in the case of a literal utterance, then perhaps we ought to say that metaphor is simply a particular use of language. In that case, metaphor belongs to the pragmatics of language and is not to be accounted for semantically--then there can be no theory of metaphoric meaning. Put in terms of the competence/performance distinction, first proposed by Chomsky,² metaphor is then not a competence but a performance phenomenon. But if it can be shown that our recognition and interpretation of metaphors depends on a competence distinct from our comprehension of literal language, a semantic account of metaphor will be in order. Then we must ask, "How do we integrate metaphoric meaning into a general theory of meaning and simultaneously account for the distinctive character of a metaphorical utterance?" Our answer to this question will involve an explication of metaphor as a second-order signification characteristic of a connotative structure.

²See N. Chomsky, *Aspects of a Theory of Syntax*, (Cambridge: MIT Press, 1965), p. 4.

I. Identifying Metaphors

The Unit of a Metaphor

When we ask for the criteria by which we distinguish a metaphor, and we are speaking here only of linguistic metaphors, we need first to identify the appropriate unit of discourse. For different distinguishing characteristics may be appropriate to single words, to sentences and to larger texts. On our account, metaphors involve a transfer from one semantic field to another of those relations governing the position of a given element in the first semantic field. The elements of semantic fields are individual words.³ Are we then to assume that a metaphor is a word, rather than, let us say, a sentence?

While Aristotle speaks of a metaphor as a single word, a name, "Metaphor consists in giving the thing a name that belongs to something else . . ." (1457a32), Max Black and contemporary linguists who have written on metaphor insist that metaphors are sentences.⁴ Robert Matthews,

³ Elements of a semantic field may also be lexicalized phrases.

⁴ The traditional account of metaphor considers metaphors to be single words or phrases. However, proverbs and riddles were also considered by Aristotle to be metaphors. In the *Rhetoric* he writes, "Proverbs again are metaphors from one species to another" (141a14). Thus he seems to have included in his practical, if not his theoretical, account larger grammatical strings than the noun or verb. Some recent writers have taken great pains to disassociate a theory of metaphor from a theory of naming. For example, Paul Ricoeur (in *Theory of Interpretation*, Chap. 3, 1976) claims that metaphor is an act of predication, not of naming. Ricoeur's argument doesn't get us far, however, for the distinction becomes trivial when, in modern logic, cum Quine, one can rewrite even sentences containing singular terms as having only variables and predicates. Although Quine's argument is not intended for the purpose, it has the consequence that any name can be rewritten as the predicate of some variable.

a semanticist whose article on metaphor, "Concerning a Linguistic Theory of Metaphor,"⁵ is relevant to many of the questions to be discussed in the subsequent pages, takes the sentential status of metaphor as fundamental to an analysis of the meaning of a metaphor. The argument that a metaphor ought not to be identified with a word but with an entire sentence is based on the observation that we often do not know if a word is used metaphorically until we see how it functions in a sentence: the word (the "focus" of the metaphorical sentence), "wolf," in and of itself, is neither metaphorical nor literal--it is the sentence, "man is a wolf" (the "frame") that must be said to be the metaphor.

It is true that the word "wolf" by itself is neither literal nor metaphorical. But is this because it is not embedded in a sentence? Consider the phrase "slum of bloom." Surely we would say that this phrase, although it is clearly not a sentence, is equally clearly a metaphor (though its meaning, isolated from any context, is quite obscure). Moreover, there are sentences which we would not be able to identify as metaphorical or literal until we see how they function in a context. Consider the sentence 1. in the context of (a) geological expedition and (b) a description of an old professor emeritus.

1. The rock is becoming brittle with age.⁶

Similarly, such proverbs as 2. or 3. could, in the appropriate context be literal statements:

2. A rolling stone gathers no moss.

⁵*Foundations of Language*, Vol. 7, 1975, pp. 413-425

⁶This example is cited by Michael Reddy for a different purpose, one which we will soon explore, in his article, "A Semantic Approach to Metaphor," *Papers from the Fifth Regional Meeting. Chicago Linguistics Society*, April 18-19, 1969, University of Chicago, Chicago, pp. 240-251.

3. I will kill two birds with one stone.

Thus there appears to be no reason to grant sentences a special status as the bearers of metaphor.

Black, nonetheless, captures an important insight in his division of a metaphorical sentence into "frame" and "focus." Modifying his position, we can say that the "focus" need not be an individual word or phrase used within a sentence. It can be any segment of discourse, as short as a single word or as long as an extended portion of text. Similarly, the "frame" need not be a sentence, but may be a modifying word or a larger text or even the conventions surrounding a given bit of discourse. But the focus, which I, in contradistinction to Black, identify with the metaphor, must be set in a frame which renders it conceptually incongruous with its frame. Were it not for such incongruity, there would seem to be no reason to read or take the expression as anything other than a literal statement. Alternatively, we can characterize this conceptual incongruity as the condition whereby the focus belongs to one semantic field and the frame belongs to another semantic field.

Notice here that an allegory would not count as a metaphor-- not because most allegories are too long to be considered metaphors, but because a well-constructed allegory both has a sort of internal conceptual consistency and is not set in a frame which renders it incongruous. Consider the modern allegory of Orwell's *Animal Farm*. Internally it is consistent as long as we accept the humanoid character of the animals on the farm.⁷ It also presents no incongruity between itself and its

⁷The fact that the farm animals speak English, calculate, draw up windmill plans and do various other things that we attribute to rational animals

immediate environment, which is that of a work of fiction and fantasy.

Let us now contrast an allegory with the following discourse:

Example 1. Speaker 1: The rock is getting brittle with age.
 Speaker 2: Yes, his lecture was not very exciting this year.

Example 2. Mary had to show her relatives from out-of-town the sights of the city. As she also intended to see the new exhibit at the Museum, she suggested the art museum for the day's outing. Mary thus killed two birds with one stone.

Rocks do not deliver lectures, exciting or otherwise, and killing birds has nothing to do with going to see an art exhibit. Such conceptual incongruities are quickly resolved when the underlined portions of discourse are understood metaphorically.

The incongruity between a metaphor and its surrounding discourse, that is, the incongruity between focus and frame, can shed light on an ambiguity in metaphor we encountered in Chapter 1. There we noted that it is not always clear which term in a metaphorical utterance is to be taken literally and which is to be taken metaphorically. We can call this a "frame-focus" problem. But when we take the unit of metaphor as a sentence, we lose sight of the fact that the problem arises when the focus, the metaphor proper, is not set in a sufficiently large frame. Thus Robert Sanders,⁸ who makes an important contribution to discussion of metaphor by calling attention to the pervasiveness of this type of

⁷ (cont.) - makes it likely that many of the sentences in the story involve selection restriction violations. Yet these sentences are not metaphorical (see pp. 127-133 below). One could argue that a sentence which asserts that a certain pig uttered some words is not conceptually incongruous, but merely false. Yet it is reasonable to say that "speak" has a selection restriction <Human> on the subject.

⁸ In "Aspects of Figurative Language," *Linguistics*, 96, 1973, pp. 56-100.

ambiguity, puzzles over why a sentence such as 4. is clearly ambiguous, while sentences 5. and 6., formally quite similar, do not display such

4. This woman is my father.

5. The senator is a gas-bag.

6. This gas-bag is a senator.

ambiguity. Sentences 5. and 6. are most easily construed as referring to an overly talkative senator, not a container of gas. Sanders cannot give any formal reason why we resist considering gas-bag as literal and senator as figurative, and concludes that this resistance is due to extralinguistic, or more properly psycholinguistic, factors. Formally, he concludes that we must consider all figurative sentences as ambiguous. However, results of an empirical study which Sanders conducted indicate that a specified figurative sentence was given the same reading by virtually all readers. Thus, while a theoretical account shows the metaphorical sentences to be ambiguous, an empirical study does not indicate this ambiguity.⁹

In spite of the results of the empirical study, we can show that even such apparently unambiguous sentences as 5. and 6. can be given two interpretations. Sentence 6., for example, can be interpreted with either "senator" or "gas-bag" as the focus. Consider sentence 6.

⁹ What appears decisive in how a sentence is read is a hierarchical ordering of such factors as the term's syntactic position, and which term's referent has the larger range of attribution. The latter consideration is extralinguistic, leading Sanders to conclude that the empirical study has "confirmed the existence of extralinguistic variables which affect the interpretation of figures of speech" (p. 96). However, I am not convinced by the conclusions Sanders draws from the empirical study. There is a great deal of hedging in his conclusions, far more than I have related in my summary. This gives one the sense that the factors he claims to be determining in the disambiguation of the sentences, are chosen in an ad hoc fashion.

in the larger frame of sentence 7., said by a pompous gas-bag manufacturer about his latest product.

7. This gas-bag is a senator among gas-bags.

The larger frame is decisive and we see here that "senator" not "gas-bag" is being used metaphorically. Sanders mistakenly thinks that the sentence ought to function as a sufficiently large frame. And for many purposes this is correct. But that is because, in the absence of decisive information, a hearer calls upon ordinary usage and the more common situations into which the metaphor is placed. Since ordinary usage and common situations are the larger frames available to the largest number of speakers of a given language, it is not surprising that, faced with isolated sentences, most readers disambiguated sentences in a similar fashion.

I have said earlier that I believe that the focus of a metaphor belongs to one semantic field while the frame belongs to another. But most words belong to several semantic fields. The context in which a word is set helps to locate the relevant semantic field, to delimit which field is operative. When the context is not sufficiently rich, then either the hearer does not know which field to locate the term in or else supplies a field to which the term can be most easily attributed. When the frame of a metaphor is not sufficiently elaborated, then there is uncertainty as to which field is being used in the metaphor. As the frame is elaborated the relevant field can be located.

Conceptual Incongruity

If we identify a metaphor by identifying an utterance in which a

portion displays some incongruity with its surrounding discourse, how are we to specify this incongruity? Does such incongruity serve as a necessary condition? a sufficient condition? In the previous chapter we encountered a linguistic device, the selection restriction rules of interpretative semantics, whose function is precisely to locate collocations which render conceptually incongruous statements and to proscribe them for speakers. Metaphors often do violate selection restriction rules. Consider the metaphor in the opening of the *Iliad*, "the rosy-fingered dawn." The adjective "rosy-fingered" would have to have as a selection restriction $\langle \text{Human} \rangle \vee \langle \text{Primate} \rangle$, but "dawn" contains neither marker. Thus the phrase violates the selection restriction rule that any noun which is modified by "rosy-fingered" be such that it is either a human or some other primate. This application of selection restriction rules leaves us, in Katz's theory, with the view that metaphors are semantic anomalies. But if semantic anomaly means that a reading cannot be given to the phrase or sentence, then metaphors are not anomalies because an interpretation can usually be given.¹⁰

Another interpretative semanticist, Matthews, who takes a view somewhat different from that of Katz, not only holds that the incongruity characteristic of metaphor is adequately specified as a violation of selection restriction rules, but also that the violation of selection restrictions is a necessary and sufficient condition for an utterance to be a metaphor,

¹⁰"A constituent is semantically anomalous just in case it is assigned no readings (the set of readings assigned to it is null)" (*Semantic Theory*, p. 49).

providing only that the utterance is not intended to be meaningless.^{11,12}

¹¹ Most linguists who write about metaphor have attacked the interpretive semantics of Katz, Fodor, and Postal. These writers include Weinreich and Reddy, as well as Bickerton and Sanders, whose work will be discussed below. Above I have criticized this semantics for its deficiency in accounting for metaphor. But Katz et al are making no claims as to the adequacy of their theory to account for metaphor. Matthews holds a somewhat different version of interpretive semantics than that of Katz et al, indeed he makes no mention of the latter. My criticisms were directed at the concept of semantic anomaly. Matthews does not appeal to the concept of semantic anomaly but to grammatical deviance. When Chomsky puts forward the idea of deviance, he marks its distinction from non-deviance in that deviant sentences need an "interpretation" to be understood, while non-deviant sentences do not. On Katz's supposition, all sentences, that is all properly constructed syntactic strings, receive interpretation of a special kind, namely readings. The sentence to which no readings can be assigned is semantically anomalous. Assuming that there is not outright contradiction here between Katz and Chomsky, we see that "reading" in Katz's sense is distinct from "interpretation" in Chomsky's sense. Otherwise the semantics discussed by Chomsky in *Aspects of the Theory of Syntax*, with which Matthews does align himself, does not diverge much from the one developed by Katz.

¹² In our earlier discussion of Katz, we spoke of selection restriction rules as semantical considerations governing the collocatability of words in a sentence. Matthews includes some syntactic considerations among selection restriction violations. To make precise what Matthews means by selection restriction violations consider the following sentences:

- i) Twenty because tomorrow the had a it
- ii) The flaming wastepaper basket snored violently
- iii) John compelled

The first example lacks even a syntactically acceptable phrase structure, i.e. there is no recognizable noun phrase and verb phrase. The second and third do have syntactically acceptable phrase structures but (ii) violates a semantic rule, the selection restriction on the predicate "snore," while (iii) violates a syntactic rule, one which Chomsky calls a "strict subcategorization rule." In (iii) we can recognize the proper noun phrase, verb phrase structure but the verb phrase is deficient in that the verb calls for an object. Matthews includes violations of strict subcategorization rules among his selection restriction violations.

Certain strictures on the formation of a well-formed grammatical string are surely more essential for the interpretability of that string. Thus violations of the sort exhibited by (i) render sentences so deviant as to be always uninterpretable, whereas the violations in (ii) and (iii) render the sentences odd, but not necessarily uninterpretable. Angus McIntosh ("Patterns and Ranges") offers a nice parallel between the interpretability of phonetic and syntactic strings. In English, a term such

The Violation of Selection Restriction Rules as a Necessary Condition for Metaphor.

The notion that metaphor involves a selection restriction violation is only a contemporary, linguistic way of stating what is probably the philosopher's favorite way of characterizing metaphor: as a species of category mistake. In a category mistake we ascribe to x, which is of a logical type A, a predicate p, which can properly be ascribed only to things of a logical type B. One might adopt a formulation such as that of Fred Sommers in his "Ordinary Language Tree"¹³ to make precise what is meant by a category mistake, or one could rely on the more intuitive, less formal discussion of Ryle (for example in *Concept of Mind*, (New York: Barnes & Noble, Inc., 1949), p. 16-18). Beardsley speaks of metaphor as involving discourse which is "self-controverting," that is "a significant attribution that is either indirectly self-contradictory or obviously false" (*Aesthetics*, (New York, 1958), p. 138). Some philosophers, in contradistinction to Beardsley, wish to distinguish self-contradictory statements, false ones and category mistakes. Katz, for example, draws a distinction between sentences 8a,b and 9a,b.

8a. My red afterimage is waterproof.

b. That truth is strawberry-flavored.

¹² (cont.) - as histle or geed "awaits only . . . a need for its use" whereas brdliou or pdilb are ineligible as English words. This is a consequence of the phonological rules governing the English language. Similarly, we could say of (ii) that it only awaits a use. We could, for example, construct a fairy tale in which this sentence had a place. But for (i) we could find no such use. It is ineligible as a sentence of English.

¹³ F. Sommers, "Ordinary Language Tree," *Mind*, 68, No. 273, April, 1959, pp. 160-185.

9a. My red afterimage is colorless.

b. That truth is known to be false.

The sentences 9a. and 9b. are self-contradictory while 8a. and 8b. are semantically anomalous.

Although we might want to claim for some type of incongruity the status of a necessary condition, selection restrictions cannot serve this role. The sentences 1. through 3. that we cited above are semantically as well as syntactically non-deviant. Matthews acknowledges the objection and suggests that sentences such as these should not be considered metaphors but should be regarded as having "an underlying metaphor" (p. 423). In the case of sentence 1. the underlying structure may be said to be

10. The old professor is a rock.

It is hard to say what such an analysis might yield for sentences 2. and 3. But even if we locate such "underlying metaphors," it still seems that we would want to say that the sentence is metaphorical. Moreover, the underlying metaphor suggested by Matthews covers a small portion of the metaphorical content of the original statement. That the old professor is a rock may be the basis of any one of several distinct metaphors, e.g.

11. Try as one may, that old rock cannot be moved

12. Upon that rock, a city of scholars was founded.

Is 10. the "underlying metaphor" for these sentences as well? But in each case "rock" has a very different meaning yielding very different metaphors. Presumably all these differently metaphorical uses of the relation between an old professor and a rock cannot be said to have the same "underlying metaphor."

I want to suggest that in each of the metaphorical sentences cited

above, that is, 1., 2., 3., 11., and 12., the violation of a selection restriction will not do to signal the incongruity because selection restriction rules are applicable only to phrases and sentences. In these sentences which are metaphorical, but do not involve selection restriction violations, virtually every word is used metaphorically and thus these entire sentences are metaphorical only when set in the appropriate context--let us say within a larger string of sentences which would serve as an incongruous frame. If one could extend the notion of selection restriction violations beyond the barrier of a sentence, so that it would serve to explain or cover such phenomena as nonsequiturs (at least a certain of nonsequiturs), then one could say that these entire sentences which are used metaphorically (as the focus) violate selection restrictions imposed by the remainder of the discourse. However, selection restrictions are features of words, not sentences, and they are meant to explicate certain aspects of the grammaticality (i.e. the syntax and semantics) of well-formed sentences, not of coherent discourse. At best, selection restriction violations may indicate a metaphor which is sub-sentential, where a word or phrase is used metaphorically within the frame of a sentence. It cannot indicate cases where the entire sentence is a metaphor, that is where all the words (or almost all) are to be understood metaphorically. Where the entire sentence is to be taken metaphorically, some other criterion of conceptual incongruity must be used to identify the metaphoric sentence.

Thus the presence of a selection restriction violation is not a necessary condition for metaphor, although for subsentential metaphors, selection restriction violations usually are involved. Notice that even

here it is not always the case: "plumber" may be understood metaphorically when it is known that Smith is not a plumber but a surgeon, as in sentence 13.

13. Smith is a plumber.¹⁴

Even when read as a metaphorical sentence, there are not selection restrictions involved. Within the proper frame, that is, a frame which indicates that the speaker is cognizant of Smith's actual profession, the statement acquires an incongruity due to its obvious falsity.¹⁵

Selection Restriction Violations as Sufficient Conditions for Metaphor

If the violation of selection restriction rules is not a necessary condition for metaphor, is it a sufficient condition? There is some reason for thinking that it is. Attempts to put more substantive constraints on what constitutes a metaphor than the simple violation of

¹⁴ This example is provided by Ina Lowenberg, "Truth and Consequences of Metaphor," *Philosophy and Rhetoric*, 6, 1973, p. 38.

¹⁵ I include obvious falsity among those criteria which count as a conceptual incongruity, although one may object to calling any sort of empirically based judgment a conceptual incongruity. There is nothing conceptually odd about saying of Smith that he is a plumber, even though the statement is false. But, I believe, the fact that the speaker himself is aware that Smith is not a plumber but a surgeon, and that in the properly metaphorical frame the hearer knows that Smith is a surgeon, the very fact of the utterance is odd. It is an oddity approximating a self-contradiction. When the context is rendered linguistically, we get an explication such as (i), one which I think can, in a loose sense, qualify as conceptually odd.

i) I know that Smith is not a plumber but a surgeon yet I assert (without mendacity) that Smith is a plumber.

I include the phrase "without mendacity" because the speaker, knowing that the hearer knows that he knows that Smith is not a plumber, cannot be said to "lie" about this matter. "Lie" implies a deceit ruled out in this situation.

selection restriction rules are generally unsuccessful.

To see why, let us look at one such attempt by Derek Bickerton. In his article, "Prolegomena to a Linguistic Theory of Metaphor,"¹⁶ Bickerton contends that words are organized into a multi-dimensional matrix where a system of binary opposition is operative.¹⁷ Within a given binary pair, Bickerton claims that one is a term marked for attributes which will allow it to be used metaphorically wherever such attribution is called for, whereas the second term remains unmarked and not suited for use as a metaphor. Thus, claims Bickerton, we can explain the metaphoricality of expressions such as iron will, iron discipline, iron determination, and what he presumes is the sheer anomaly of steel will, steel discipline, steel determination. Iron and steel, he believes, form a binary pair where in English iron is marked for the specific attribute of hardness, while steel is not; which term is marked is arbitrary and varies from language to language.¹⁸

But Bickerton is unwarranted in claiming that steel determination, steel will, steel discipline, are not, and could not, serve as metaphors. He has merely been seduced by common usage and metaphors are not thus

¹⁶ D. Bickerton, "Prolegomena to a Linguistic Theory of Metaphor," *Foundations of Language*, 5, 1969, pp. 34-52.

¹⁷ This is a matrix analogous to the one put forth for phonological elements by Morris Halle in "On the Bases of Phonology" (in the *Structure of Language*, ed. J.A. Fodor and J.J. Katz, (Englewood Cliffs, N.J.: Prentice-Hall, 1965), pp. 324-333) and based on Roman Jakobson's binary system of distinctive features.

¹⁸ Bickerton cites the case of iron, *hierro*, and steel, *acero*, in Spanish where steel, not iron, is the marked term. He remarks that even in loan-translations, iron-curtain and iron lung, are rendered *celon de acero* and *pulmon de acero*, indicating that steel is consistently the marked term in Spanish.

restricted. In other cases he adduces examples drawn from poetry, that is, metaphors which have been bona fide by appearing within recognized canons. But any of his examples of mere deviance would serve as metaphors within an imaginatively supplied context. I may, for instance, want to say that someone has a steel will, implying that his will was fashioned by a processing which has rendered it even more unyielding than iron. Bickerton's "attributes" are meant by him to account for the ability of a speaker to generate metaphors, because an attribution such as 'hard' to iron presumably makes it possible for iron to enter into collocations where many of its usual properties do not figure. Thus being 'marked' makes a word capable of crossing certain categorical boundaries and being used in novel ways. Ironically and importantly, Bickerton's analysis relies on the usual connotations of a word, except that these connotations have become rigidified as marked attributes and made the exclusive property of one of a pair of congeners.¹⁹ Rather than account for the creativity of metaphoric use of language, Bickerton's analysis only codifies given metaphoric uses.²⁰

Robert Sanders,²¹ while employing new linguistic apparatus, also succeeds only in instituting traditional constraints on what is to count as a metaphor. He proposes a set of "redefining conditions" which specify

¹⁹ Indeed, one wonders how his 'attributes' differ at all from 'connotations,' in the sense of associations.

²⁰ This is analogous to trying to define works of art by codifying those features of extant works of art such that a new work which breaks the rules of the established order cannot possibly be included as a specimen of the canonical form.

²¹ R. Sanders, "Aspects of Figurative Language."

what formal conditions must obtain in the underlying form of sentences if they are to be identified as metaphorical. Sanders takes the view of generative, rather than interpretative semantics, claiming that the semantical as well as syntactic considerations are pertinent to the underlying form of sentences. He argues that all nominals with a "concrete" referent (e.g. rock, table) have in addition to the concrete features, abstract dimensions, and as metaphors they often abstract from a concrete term its abstract dimensions. Thus "father" would be represented as having the set of abstract predicates {[Protector] xy, [Strong] x}, the "A-set," as well as the set of concrete predicates {[Mature [Male]] x, [Sire] xy}, the "C-set."²²

What I believe Sanders is in fact doing is characterizing every concrete nominal as having a denotation and a connotation, where the denotative predicates pick out a literally specified referent and the connotative predicates spell out some common associations. Insofar as the 'concrete' predicates specify the usual referent, there is some virtue

²² According to Sanders, this representation is not merely employed ad hoc so as to account for metaphor, for this dual aspect of a father is needed to read (i) (with the help of contrastive stress) as noncontradictory.

i) He is my father, but he is not my father.

The proposal that all concrete nominals be treated as having one set of predicate features which are concrete and another which are abstract is problematic at best. If we look at the way Sanders proposes to represent "father"--

$$\{_C[[\text{Mature}] \text{Male}] x, [\text{Sire}] xy\} \cdot \{_A[\text{Strong}] x, [\text{Protect}] xy\}$$

--we see that, within the set of concrete predicates there is at least one concrete nominal (used predicatively), MALE, which itself would need to be characterized as composed of a set of concrete predicates and abstract predicates. Among its concrete predicates would be some concrete nominals, e.g. ANIMATE, which would in turn need this dual characterization, ad infinitum--for Sanders proposes that every concrete nominal be so represented. Moreover, many would balk at considering "Strong" an abstract predicate.

to Sanders' perception that it is not the concrete predicates that function in a metaphoric use of the term. Metaphors can be said to have referents only by a very circuitous route and, to the extent that the set of 'concrete' predicates disallows any detour from a term's usual predication, they cannot figure in a metaphor.

However, the difficulty with specifying predicates which are utilized in the metaphoric use of a word, the set of "abstract predicates" in the case of concrete nominals, is that metaphors often call upon resources of a word that were quite unimaginable prior to that metaphor. If the set of predicates is sufficiently open to allow for these novelties then one may ask about the usefulness of postulating such an indefinite entity.

Metaphor, as we have just seen, involves some sort of violation of language and thought as they are literal and well-ordered. It seems natural that such violations must be contained if it is to be part of a decorous and "sensical" use of language. Thus, as Beardsley says, summarizing in a very liberal version an entire tradition of commentary on metaphor,

The more difficult it is to work out connotations of the modifier that can be attributed to the subject, the more obscure is the metaphor--but this obviously depends upon the powers of the reader . . . But if there are no such connotations, we have not a metaphor, but nonsense of a particular kind (*Aesthetics*, (New York, 1958), p. 143).

This is a liberal version because it implies that any connotative linking of a subject to a modifier will count for a metaphoric interpretation, and it is extremely difficult to imagine a case where no such connotations can be found. Beardsley himself acknowledges that "we cannot with certainty know that a given attribution is nonsensical, because

someone may find a meaning in it that we have overlooked." In the history of literature, it is the surrealist poets and critics who have legitimized the practice of putting together words coming from the most diverse contexts. It is probably safe to say that prior to the dicta of Pound and Breton²³ theories of metaphor, which were filled with warnings against mixed metaphors and caveats against attempts to make metaphors from unrelated terms, did not even countenance a thought such as Beardsley's. Thus, it seems the line between nonsense and metaphor is drawn only with difficulty and at the risk of underestimating the generative power of metaphor to create new sense instead of nonsense. Matthew's claim that the presence of selection restriction violations is, of itself, a sufficient condition for interpreting a sentence metaphorically drops all constraints on the interpretability of syntactically acceptable strings, and this is doubtless salutary. However, without desiring to reimpose such constraints, we must see that semantic deviance is not a sufficient condition for metaphor.

Matthews adds a proviso to his sufficient condition: that the utterance in question is not intended to be meaningless. The most obvious counter-example to Matthew's assertion is a sentence in which the speaker has simply and unwittingly made a mistake. Mrs. Malaprop's dialogue is full of such amusing errors, as when in a statement in which we expect "prodigy," she states, "I would by no means wish a daughter of mine to be a progeny of learning." Children tend to make the most poetic mistakes

²³"To compare two objects, as remote from one another in character as possible, or by any other method put them together in a sudden and striking fashion, this remains the highest task to which poetry can aspire."

(André Breton, quoted by Richards in *The Philosophy of Rhetoric*)

While sitting in a good Italian restaurant, I overheard an eight year old boy, obviously of boarding-school breeding, complain that unlike the spaghetti sauce served here, the one at school was always "blunt." His mother corrected him: "bland." "No," he insisted, "blunt, the way a knife is blunt." The difference between a food critic²⁴ and this young boy assessing a tomato sauce as "blunt" is the difference between using the term metaphorically and using it (however charmingly) literally, but incorrectly. These are instances of utterances which are intended as meaningful, literal statements, but which simply fail as such.

Intentionality and Metaphor

Here is, perhaps, the time to remark on a certain equivocation with the word 'metaphor.' If we have a syntactically well-formed string of words which violates selection restriction rules, can we say of this string that it is a metaphor just in the case that its utterer intended it as a metaphor²⁵ or also in the case that some hearer understands it as a metaphor, regardless of the intention of the speaker? Certainly the examples of semantic deviance produced in linguistic journals and texts are not intended as meaningful, yet could be regarded as metaphors by certain imaginative readers.

Generally, I believe, 'metaphor' is taken to mean some utterance

²⁴ It would not be difficult to envision a food critic who uses language imaginatively, such as Calvin Trillin, author of *American Fried*, making such a judgment.

²⁵ We might say that the intention may even be unconscious, e.g. when a Freudian slip is in fact a metaphor for some repressed wish, but this involves the problematical category of "unconscious intentions."

having the appropriate necessary conditions, which was intended as a metaphor. It is normally by way of the context that we ascertain such intentions. Here context includes not simply the linguistic and spatio-temporal environment in which the utterance occurs, but also the conventions surrounding the discourse in which the utterance is located. Within certain limited contexts, e.g. modern poetry, the presence of a selection restriction violation may be sufficient evidence that a word or phrase is to be understood metaphorically. Within other conventions, those of children's stories, fairy tales, and allegories, certain selection restriction violations are most definitely not meant to be understood metaphorically. When the fairy tale tells us that "The wolf said, 'I'll huff and I'll puff and I'll blow your house down,'" it is not in some metaphorical sense that the wolf so threatened the little pigs. In the convention of fairy tales wolves do speak in the literal sense of "speak." Within the context of ordinary discourses, most speakers have developed a sensitivity as to the degree of the deviance in a selection restriction violation, such that we can separate mistakes from metaphors, although sometimes we simply do not know how to understand a given utterance. In the speech of foreigners and young children, speech which is more likely to display grammatical errors, we are likely to take selection restriction violations more as mistakes than as metaphors.

Thus, on the one hand, if we do not equivocate on the term 'metaphor' but consider it to refer only to those utterances that are intended as metaphors, then, except in very special cases, semantic deviance does not constitute a sufficient condition for metaphor. If, on the other hand, we allow the equivocation, then the presence of a violation of selection

restrictions is a sufficient condition for metaphor, for it is always conceivable that someone will be imaginative enough to interpret a semantically deviant sentence metaphorically--even if such a feat involves disengaging it from its context. In this case, we might note, there is no point to the proviso that the sentence was not intended to be meaningless.

Yet to allow the equivocation plays havoc with the conventions upon which language is based. If mistake can always be transformed into metaphor, the distinction between literal and metaphorical collapses as well. Indeed the distinction between mistake and metaphor is not always clear. Walker Percy, in "Metaphor as Mistake,"²⁶ recollects a hunting trip he took as a child, on which he saw a fascinating bird whose flight was breathtaking. The black guide called the bird a "blue-dollar hawk." The boy learned later, to his great disappointment, that the bird was called a "blue-jartr" hawk. Another case of such "accidental stumblings into poetic meaning" he cites is that, in Mississippi, the coin record-player manufactured by Seeburg is commonly called, by blacks, "seabird." These mistaken names have a far greater poetic effect than the proper names. While they are not conscious attempts at metaphor--they are properly mistakes--they share with metaphor the speakers' and hearers' attempt to find a name for a thing which is not simply arbitrary, but motivated by the experience of that object. Moreover, these "mistakes" carry a certain authority which validates them as names, an authority which replaces the intentionality behind the making of a metaphor. It was not just anybody who named the bird "blue-dollar hawk," but the presumably

²⁶ W. Percy, "Metaphor as Mistake," *Sewanee Review*, 66, 1958, pp. 79-99.

knowledgeable guide. It was by virtue of the guide's authority that the child could respond in seriousness to the misnomer, just as the intention to make a metaphor on the part of some speaker makes us take seriously the (metaphorical) misnomer. In the case of the 'seabird' example, it is the authority vested in a community of speakers which is operative. Such authority or intentionality is missing in a malapropism.

Is such authority or intentionality really necessary? Here we must endorse the words of Percy, who writes,

. . . Where the Namer means nothing or does not know what he means or the Hearer does not think he knows what he means, the Hearer can hardly participate in a cointention. Intersubjectivity fails. Once the good faith of the Namer is so much as called into question, the jig is up. There is no celebration or hope of celebration of a thing beheld in common. One is only trafficking in the stored-up energies of words, hard won by meaningful usage. It is a pastime, this rolling out the pretty marbles of word-things to see one catch and reflect the fire of another, a pleasant enough game but one which must eventually go stale (pp. 76-77).

We can allow the equivocation on metaphor, but only at the risk of eventually losing metaphor itself.

The Role of Extralinguistic Information

There is still another argument for not adopting selection restriction violations as our specification of conceptual incongruity, or as a necessary or sufficient condition for an utterance to be a metaphor. Robert Sanders, in the article cited above, questions whether semantic deviance such as semantic anomaly is a legitimate concept. A sentence such as 14. illustrates that a sentence with an apparent selection

14. I was a morsel for a king.

restriction violation can be interpreted as a literal sentence, in par-

ticular when the extralinguistic fact supplied is that the king in question is a cannibal. To the Katz-Fodor anomalous sentence,

15. The wall is covered with silent paint

Sanders offers the suggestion that this sentence "might refer to a specially developed paint that is noiseless when applied with a roller" (as opposed to the squishy noise that generally ensues).

In using the notion of selection restrictions, we are committed to the distinction between knowledge about the world and knowledge about the meanings of words.²⁷ Matthews attempts to construe the concept of a

²⁷ This involves us in all the difficulties of the synthetic-analytic distinction. For the purpose of this discussion I will hold a modified form of the synthetic-analytic distinction. For a given language community, I believe that if we take a synchronic slice of the language, we could establish what speakers take as the meaning of a word and what they take to be the extralinguistic facts. This will differ with any other synchronic slice, although few differences will be radical. Moreover, we could constitute the linguistic community as all fluent speakers of English, regardless of where on the globe they happen to be, or as only those natives of Hoboken, New Jersey. Even within one synchronic moment different small linguistic communities will vary as to what is analytically true and what may be only synthetically true of a given lexical item. But, someone will argue, individuals will differ as well--if the analyticity of words is a purely empirical matter, then no individual's judgment has a prior status and the distinction falls into a mire of subjective judgments. It is true that individuals will differ on the analytic-synthetic distinction for many words. But it must be remembered that each individual is a member of a number of different language communities. A resident of Hoboken is also a cab driver, a housewife, a church-goer, a philosopher, let us say, and in each activity encounters and engages in different linguistic activity which calls upon different resources of the language. Each person is at the point of intersection of a number of different communities and creates an idiolect. Thus two individuals from a given language community may differ as to what they consider to be the meaning of a word, the differences reflecting the other language communities of which they are a part. We might say that only purely idiosyncratic conceptions of what properly belongs to the meaning of a word is not properly part of the word's meaning. This is in the spirit of Wittgenstein's argument against a private language and Saussure's argument that only within a community of language users can the words be assigned values. Insofar as an individual judgment concerning the meaning of a word reflects the usage of some language community, that judgment accurately reflects the meaning

lexical feature far more broadly than Katz. For Matthews lexical features, including selection restrictions, are simply the "common uses of the lexical entry and thus lexical features might be viewed as elucidations of literal usage rather than as an analysis or definition of the lexical entry" (p. 419). For Katz, the lexical features constitute the definition of a word, independent of extralinguistic information about the referent. However, even on Matthew's more liberal account, the feature [Cannibal] is not likely to figure as a feature of "King." And in no way can the obvious falsity of 13. be captured by selection restriction violations. Thus such extralinguistic information as may be needed to interpret 13. and 14. properly cannot be incorporated into an analysis of metaphor committed to selection restrictions.

Notice that while the investigation of metaphor has called to our attention the importance of extralinguistic information in identifying and interpreting a sentence as metaphorical, this function of extralinguistic information is not particular to metaphor. We sometimes need the same type of information in order to properly read a non-figurative utterance.

We must conclude then that selection restriction violations offer us neither necessary nor sufficient conditions for metaphor. Our arguments confirmed that some form of conceptual incongruity between the frame and the focus of a metaphor is a necessary condition for an utterance

²⁷ (cont.) - of the word for speakers at that synchronic moment. Sometimes when the usage of one language community is sufficiently divergent from the larger language community of which it is a part, we consider such usage as part of a dialect. In fact, sometimes what is metaphorical for the larger language community has become literal for some smaller embedded language community. Thus to specify that some things count for the meaning of a word while others are facts about its referent is often a distinction relative to some language community at some synchronic moment of the language and not an absolute linguistic fact.

to be a metaphor. In Chapter 5 I will show, by means of several illustrative analyses, how this incongruity can be characterized by the shift in semantic fields enacted in a metaphor, so that the frame belongs to the semantic field of one component of the metaphor while the focus belongs to a second semantic field, that belonging to the second component of the metaphor.

Our arguments against adopting selection restriction violations as a sufficient condition for metaphor also show that conceptual incongruity will not serve as a sufficient condition for metaphor. Since selection restrictions are a type of conceptual incongruity and if one form of conceptual incongruity is not sufficient to mark a bit of discourse as metaphorical then we cannot say that conceptual incongruity is a sufficient condition. Moreover, any of the specific arguments could be directed at other particular forms of conceptual incongruity (including obvious falsity). Other attempts to find more constraining sufficient conditions for metaphor have been equally futile. It is not clear that sufficient conditions for metaphor can be found.

The possibility of using language metaphorically must be inherent in the structure of language itself, but the metaphors that can be created by a given word cannot be specified by added senses, attributes, markers, or predicate features. Any such attempt limits the virtually limitless metaphoric possibilities of a word, phrase or sentence. What must be found is some generative principle which formally accounts for a term's metaphoric potentiality without any substantive attribution to that term.

II. Interpreting Metaphors

In a previous chapter we argued that while Max Black presumably holds a perspectival theory of metaphor, his specific views on the interpretation of metaphor conflate, rather than hold the two components of a metaphor in a tensive relation. It is curious that in the literature on metaphor, what is perhaps the most central question, the interpretation of metaphor, is rarely given an explicit treatment. I mean here the theoretical question, not the literary interpretations of metaphors to which volumes are devoted. Black's treatment shows us how slippery a matter the interpretation of metaphor is.

Linguists who have studied metaphor tend to devote more attention to the problem of interpretation, since, I presume, the question in regard to metaphor seems not unrelated to the way in which we interpret any interpretable string. Uriel Weinreich, realizing that Katz's selection restrictions do not allow a reading to be given to metaphorical sentences which violated these restrictions, rejected the concept of a selection restriction and substituted the notion of a "transfer feature." Weinreich's transfer features contain approximately the same information as selection restriction violations. But rather than serving as rules proscribing the interpretation of certain collocations, transfer features simply move from one term to the term with which it collocates. In our example, "rosy-fingered dawn" the feature [+Human] which would belong as a transfer feature to "rosy-fingered" would adhere to "dawn." But "dawn" presumably has a feature [-Human], thereby creating the incongruity of which we have spoken. To interpret the phrase Weinreich introduces the 'Semantic

Evaluator,' which assigns the degree of deviance in accordance with the interpretability of the metaphor. But what remains unclear is how such an Evaluator is to distinguish between one contradiction and another as the transfer of features marked by "+" or "-" has reduced all deviance to logical contradiction. (P&P) is not more or less deviant, it is always a contradiction.

Matthews claims that the competence to understand metaphor, which is equivalent to interpreting that class of deviant sentences which violate selection restrictions, is completely analogous to the way in which we understand non-deviant sentences. However, in metaphorical sentences we are guided by the selection restriction violation to de-emphasize those features of the appropriate lexical item of the sentence so that we may then proceed as we would in understanding a non-metaphorical sentence.

The redefining rules that Sanders presents are essentially another version of the thesis that metaphorical interpretation involves the addition and deletion of some lexical features of a word or words in a phrase or sentence; in particular some predicates of the C-set of a word or words in the phrase or sentence are deleted or added to another word.

Although it does seem plausible to say that in understanding a sentence metaphorically, we do something to the lexical features of the words of the sentence so that we may resolve the selection restriction violation, the mere deletion or de-emphasis of certain features does not tell the whole story. We may remember that Weinreich attempted a similar analysis, claiming that we transfer the features from one term to another. While there are difficulties with this view, it does have the advantage

of trying to preserve in its formalism, the reason for what has come to be known as metaphoric tension,²⁸ since the addition of transfer features in the case of a metaphor creates a lexical item containing contradictory lexical features. Matthews' view resolves the conflict set up by the selection restriction violation all too completely.²⁹ Consider Yeats' metaphor "child-bearing" moon, as in the line "Crazed through much child-bearing, the moon is staggering in the sky," and let us assume that it is from the lexical entry for moon that we de-emphasize those features which violate selection restrictions on what is child-bearing, <Animate>, <Human>, <Female>. Thus to make sense of the phrase we must presumably disregard the inanimate, non-human, sexually neuter attributes of "moon." Such a conception of the moon strikes us more properly as mistaken than as metaphorical. It is through the metaphor that the meaning of the moon, as an inanimate object, is transformed into something animate and life-giving: the moon, in its literal sense, becomes the bearer and possessor of those female cycles with which it is associated. This phrase is a metaphor not because some features of "moon" are de-emphasized, but because it is capable of making the reader grasp both the actual barrenness of the moon, and its seeming procreative cycle as it grows from a thin sliver to the rounded shape of a pregnant woman.

But one need not resort to arguments invoking the power of metaphor

²⁸ See Max Black, "Metaphor," op. cit.

²⁹ Sanders' resolution of how we interpret metaphors, though stated in terms different from those of Weinreich and Matthews, is subject to the same criticisms. He proposes that features of the concrete set of predicates of the term to be redefined be deleted and features from the abstract set of predicates of some other term in the sentence be transferred to the reinterpreted term.

to challenge Matthews' analysis. As we mentioned earlier, there are certain literary conventions, e.g. fairy tales, within which the breaking of selection restriction rules does not result in a metaphor. If Matthews were correct in his description of how we interpret deviant sentences metaphorically, then there would be no difference between the way we interpret "And the dog said to the little boy . . ." as it occurs in a fairy tale and the way it occurs in the dialogue of a dog lover. It is precisely in its non-metaphoric occurrence, in the fairy tale, that the sentence would be read as Matthews suggests we read metaphors. In the children's tale, we would assume a real dog was actually speaking, but those features of the dog which relate to the feature of dog which is incompatible with linguistic communication would be de-emphasized. There are also non-literary conventions which confound Matthews' claim. In mathematics we often encounter words of our everyday language used in a completely new way. The terms "rank," "chain," "nest," in set theory have only a few of the lexical features which usually define them in ordinary discourse. These terms are not being used metaphorically when they are used in set theory. We generally say that in this context they have a technical meaning. According to the feature deletion/addition approach to metaphor, we interpret technical discourse and metaphorical discourse in precisely the same way. This is, at best, an unintuitive conclusion.

Using the notion of semantic fields I will try to show in Chapter 5 how the move from one semantic field to another effects a change in the relations among the terms in the second semantic field. This reorganization of the relations guides the interpretation of the incon-

gruous bit of discourse. But in order for such interpretation not to suffer the conflation of contents for which we have criticized the authors discussed, it is important to keep alive the perspectival view of metaphor. Matthews' belief that feature addition and deletion could explain the way we interpret metaphors is based on the contention that we need to posit no additional competence, beyond the competence to recognize deviant sentences, to interpret metaphors. If he is correct, then there can be no linguistic way of specifying its perspectival character, and then we may have no way to distinguish metaphor from other cases where two or more contents are conflated in a new meaning, as in technical discourse.

III. The Connotative Structure of Metaphor

Metaphor as Competence or Performance

Matthews claims that the recognition and understanding of metaphors is fully accountable in terms of the same competence by which speakers understand non-figurative language. Metaphoric use of language is a performance phenomenon, for which we need to give no special account on the level of competence. In other words, Matthews is claiming that there is no structural feature of language, considered as a system, which is particular to metaphor and would need to be accounted for.

If the violation of selection restriction rules constitutes neither a necessary nor a sufficient condition for an utterance to be a metaphor, then Matthews' postulation, that the recognition and understanding of metaphor is fully accountable in terms of the same competence

by which speakers understand non-figurative language, becomes difficult to maintain. For the claim that metaphor is a performance phenomenon³⁰ is based on the contention that the competence-related facts of recognizing and understanding metaphors are coincident with the recognition and interpretation of deviant sentences, i.e. sentences violating selection restrictions. But if selection restriction violations are neither necessary nor sufficient conditions for an utterance to be metaphorical, then these competences are not coincident, and competences of a different sort than those utilized in the 'ordinary' nonfigurative use of language may have to be introduced, thereby suggesting that metaphorical language has unique structural properties (an underlying form) and is not "simply" a performance phenomenon.

More likely it is the case that metaphor is one among several linguistic phenomena for which a distinct competence is required. John Helmer, in his very stimulating essay, "Metaphor," (*Linguistics*, 88, 1972, pp. 5-19), brings together evidence which connects metaphoric with metalinguistic activity. He cites a study by psychologists Asch and Nerlove that children under the age of eleven or twelve do not use or understand metaphor.³¹ Children of five age groups, from three to twelve years old, were asked to apply the words sweet, hard, cold, warm, etc. to a set of objects and to people. The youngest children applied the terms only to

³⁰ Ina Lowenberg, in her article, "Identifying Metaphors," argues against a rigid construal of this dichotomy.

³¹ Helmer also cites a work, in press, by a psycholinguist, McNeill, which claims that "the sentences wild Indians shoot running buffalos and wild elevators shoot ticking restaurants are to the children who hear them or use them as equally literal; those instances of a child's language which may be interpreted metaphorically by an adult . . . are not so intended by their author."

the physical objects. Children from ages 7 to 11 or 12 applied them both to the objects and people but considered the two applications to be disjoint. Only the oldest children attempted to draw connections between the various applications of a word. And it was only among these children that experimenters found the ability to grapple with questions relating the multiple use of labels. Helmer suggests that "before eleven, children who hear a question of the form 'Why does sweet apply to . . .?'" or 'Are people soft?'" do not know how to answer, or answer inappropriately because they do not know what the question means." And this, he believes, is because they have not yet developed the ability to use or understand metalanguage. This extrapolation, coupled with some studies of pathological language of aphasics³² and schizophrenics, leads Helmer to conclude that metalinguistic ability is a precondition for the use of metaphor.³³ If the grammatical speech of a child below the age of eleven is sufficiently explained by the language competences Matthews invokes, and if after that age some new ability which concerns metalanguage and metaphor becomes manifest, it appears that these abilities call on additional linguistic competences.

In the *Studies in Child Language and Aphasia*,³⁴ Roman Jakobson distinguishes two types of aphasia, which suggests that our linguistic competence may be divided into two sets of capabilities. Jakobson writes,

Every form of aphasic disturbance consists in some impairment, more or less severe, either of the faculty for selection and substitution

³²For example, see the quotation by Jakobson cited below.

³³Later, we will look again at Helmer's conclusion.

³⁴R. Jakobson, *Studies in Child Language and Aphasia*, (The Hague: Mouton, 1971) from the *Janua Linguarum Studia Memoriae, Series Minor 1114*.

or for combination and contexture. The former affliction involves the deterioration of metalinguistic operations, while the latter damages the capacity for maintaining the hierarchy of linguistic units. The relation of similarity is suppressed in the former, their relation of contiguity in the latter type of aphasia. Metaphor is alien to the similarity disorder, and metonymy to the contiguity disorder (p. 90).

By this Jakobson means that these disorders "find their most condensed expression in metaphor and metonymy respectively." All the linguistic competences cited by Matthews and the other authors we have cited have to do with problems of combination, with the ordering and combination of words along a syntagmatic chain. But metaphor also involves ordering and selection among and between paradigmatic classes. Thus if we take the pathological condition of aphasia as revealing distinct capacities, in other words, distinct competences, then without claiming that metaphor itself must be characterized by a distinct competence, we can claim that a set of linguistic phenomena, of which metaphor is one element, is not accounted for by the linguistic competence put forth by Matthews.

We have considered various linguistic approaches to metaphor, especially those of Matthews, Bickerton, and Sanders, which differ as to whether they adopt the framework of an interpretive semantics, a structural semantics of binary oppositions, or a generative semantics. Yet their analyses of metaphor are both strikingly similar and similarly flawed. All three regard metaphors as existing only on the sentential level of discourse. and each regards metaphor as a violation of some rules governing the formation of nondeviant sentences. But, as we have seen, there is no reason to give the sentence a privileged place with regard to metaphor. While Matthews does not place any constraints on what sorts of selection

restriction violations may constitute a metaphor, both Bickerton and Sanders make substantive claims as to the content of metaphors: Bickerton claiming that metaphors are constructed with the marked attribute of one in a binary pair of terms; Sanders claiming that there are a set of abstract predicates which serve as the basis of metaphoric usage. Yet we have seen that both Matthew's purely formal condition and Bickerton's and Sander's more substantive conditions can be shown to be neither necessary nor sufficient. The former approach includes too much, while the latter excludes too much.

Matthews and Sanders devote a good deal of attention to the problem of identifying metaphors, in the sense of distinguishing metaphorical from literal language, while Bickerton attempts to distinguish metaphors from mere deviant discourse. Like the former, metaphorical language is meaningful and not mistaken; but, like the latter, it breaks the rules of 'standard' discourse. Although intentionality is necessary to purposeful 'mistakes,' there is a structural feature to such discourse, namely, its perspectival character, which is overlooked not only by Matthews, Bickerton and Sanders, but by most other writers on metaphor. While the linguists have ignored this feature, a blindness which, as we shall see below, is exemplified in their analyses of how we understand metaphors, the philosophers and literary critics have not explicated it in terms of a structural feature of language. It is to this hiatus that I wish to bring Hjelmslev's notion of a connotative semiotic.

A Connotative Semiotic

Louis Hjelmslev in *Prolegomena to a Theory of Language* saw in the

establishment of a formal linguistic theory the inception of a general semiotic study. The connotative semiotic of which we speak is part of this larger project. A semiotic is a system of signs and is distinguished from quasi-sign systems like games, e.g. chess, in that it consists of two planes, a plane of expression and a plane of content, which are formally as well as materially non-identical.

A language is a particular semiotic, one which has the further stricture that its signs are decomposable into non-meaning bearing elements called figurae,³⁵ of which we shall say more later.³⁶

Furthermore, within natural language we find a plane of expression --a system of phonemes--and a plane of content--a system of ideas. The phonemes (the figurae of spoken language) are combined to form strings of phonemes which can carry meaning, the meaning which results from combinations occurring in the plane of content. Thus far Hjelmslev's scheme adheres to Saussure's conception of language as composed of a system of signifiers,

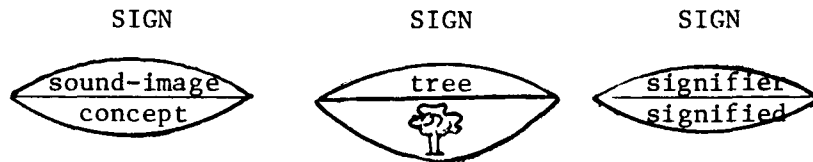
³⁵ Hjelmslev's project was, in part, to decompose the linguistic elements to their ultimate components--noting along the way the relationships pertaining to these elements. Thus he remarks that words are not the ultimate signs of language. Through the appropriate analysis we find that "an English word like in-act-iv-ate-s . . . can be shown to contain five distinguishable entities which each bear meaning and which are consequently five signs." But even these can be decomposed into non-signs, figurae, which can readily be used to recompose themselves into other signs.

³⁶ A language then needs only a handful of figurae which, through various arrangements, become available for an indefinitely large number of signs. These figurae thus provide natural language with its basic economy, suppleness of form, and extraordinary effability.

Thus Hjelmslev and others have speculated that a language per se is capable of expressing all other semiotics. The latter claim may hold for natural languages but not for all others such as the notational system described by Goodman, and discussed below.

arbitrarily coordinated with a system of signifieds:

Saussure



These two aspects of the sign are, however, both generalized and relativized by Hjelmslev. Hjelmslev's planes need not identify any particular aspect of language, but only the relation between what is expressed and what is expressing. Thus what would be for Saussure two different signifiers, let us say the system of phonemes and the system of orthographic inscriptions we call our alphabet, may for Hjelmslev, be related to each other as expression and content planes in a project of transliteration or transcription.

The relation between the plane of expression and the plane of content is one of signification, such that what is on the expression plane signifies what is on the content plane. Natural language has for most purposes a "denotative" structure, exemplified by Saussure's signifier/signified, and Hjelmslev called such a structure a "denotative semiotics." This denotative semiotics has, I will say, a first-order signification:

First-Order Signification: Denotation



He also saw that there are semiotics, both within and outside natural language, in which either the expression plane or the content plane is occupied by an entire sign. He adduced two such structures in which one of the two planes of a sign bifurcates, duplicating the duality of the

sign on that plane. In the case where the content plane bifurcates, so that on the content plane we have an expression plane and a content plane, we have a metasemiotic:

Second-Order Signification: Metalanguage

SIGN	Expression			
	Content	Expression	Bees	'Bees'
		Content		Bees

Bees			
	Bees	bīyz	
		apian beings	

and more particularly in the case of natural language, a metalanguage.

In the case where the expression plane bifurcates, so that on expression plane we have an expression plane and a content plane, we have what Hjelmslev called a connotative semiotic.

Second-Order Signification: Connotation

SIGN	Expression	Expression
	Content	Content

The signification which results when we have one of the following two situations:

1. on the plane of expression we have a complete semiotic or
2. on the plane of content we have a complete semiotic.

I will call a second-order signification. To call a semiotic which has on the plane of content another semiotic accords well with the idea of a metalanguage. For metalanguage involves the uses of language to speak about language. (A metasemiotic is simply a generalization, where a semiotic is employed to signify a semiotic.) And as a sign is used metalinguistically, it does not have its ordinary signification, but again, a second-order signification.

Hjelmslev uses the notion of a connotative semiotic to enable us to take into account certain aspects of tone, dialect, regional language, jargon, and so forth. These indicators (or connotators as Hjelmslev calls them) carry information additional to the content of the denotative sign, information which is carried by way of the mode of expression of the denotative sign. Although connotators can often be disregarded, they are at times at least as significant as the principal denotative sign. For example, often more is conveyed by the characters of *My Fair Lady*, Professor Higgins and Liza, through their respective dialects, than through their respective dialogue.

All connotators involve features of a signifier which carry information additional to their usual signified: in the example, the dialect which signifies the social standing of the characters. Hjelmslev sees connotation enacted only by such secondary means of communication, and does not consider what might happen if we allow a complete conventional denotative sign to occupy the plane of expression. In metalanguage we have a conventional denotative sign on the plane of content. The placing of such a conventional denotative on the plane of expression of a connotative semiotic is, I propose, what happens in metaphor:

Second-Order Signification: Metaphor

Bees	Bees	bīyz
		apian beings
	Workers	

Consider the following lines from Shelley:

Wherefore, Bees of England, forge
Many a weapon, chain and scourge.

Bees do not forge weapons: the discourse is plainly incongruous. The

phonetic sequence bees simply cannot signify its usual concept of apian creatures without absurdity. If instead we consider not the signifier bees, but the entire sign, that is, the phonetic expression together with the conceptual content, to be the expression of some other content, some appropriate subject for the predicate "forge many a weapon," then the line becomes intelligible. Shelley is addressing the workers of England. Notice that it is to the focus of the metaphor, bees, that the connotative structure pertains.

Considerations such as the violation of selection restrictions, redefining conditions, obvious falsity or some other form of conceptual incongruity serve the necessary role of forcing the hearers to focus on the language used, to foreground³⁷ the segment of discourse responsible for the incongruity. Language which is foregrounded is no longer a simple denotative semiotic where the expression level serves only as the vehicle for the content level. Language which calls attention to itself must be regarded as a connotative semiotic.³⁸ Thus the foregrounding consequent upon some incongruity causes us to look for a second content level, to regard a denotatively complete semiotic as part of a connotative semiotic. This also explains why it is possible to equivocate on the meaning of 'metaphor' in the way I described earlier. For even if an utterance was not intended as having this connotative structure, such

³⁷ see Mukařovský for his use of the term "foreground" in "Standard Language and Poetic Language," *Prague School Reader*, ed. P. Garvin, (Washington, 1964), pp. 17-38.

³⁸ Beardsley (in *Aesthetics*, p. 138) says that this is language in which what is asserted is other than what is stated. However in metaphorical utterances it is not clear whether anything is asserted, since assertions are presumably subject to truth valuations and it is at best debatable whether or not metaphorical statements have truth values.

a structure can be imposed on many utterances by a sufficiently imaginative reader. In the following sections I will develop the concept of metaphor as a connotative semiotic more fully. Now it will suffice to view this as an alternative linguistic characterization of the formal underlying structure of metaphor.

The most pressing weakness in the linguistic analyses we have thus far considered lies in the inability of these theories to account for the way in which we interpret metaphors. All three accounts include various versions of the basic idea that some attribute, or lexical feature, is added, deleted or de-emphasized in the focus of a metaphorical sentence. I have already argued against this view. If metaphors were understood in the way these writers suggest, then they would not be difficult to paraphrase, nor would they differ much from the simple extension of a word's meaning. Metaphors would be a special kind of neologism, not one with a new phonic sequence, but one with a new semantic representation. The special conventions, e.g. fairy tales, and technical language, in which words are used in this way, illustrate the fact that metaphor is something distinct from feature addition or deletion.

It is the failure of these writers to recognize that metaphor has the dual structure of a connotative semiotic that permits them to regard metaphor as simply the transient extension or contraction of a word's meaning.

Second-Order Signification: Metaphor and Metalanguage

Metaphor, I am claiming, is characterized by a particular structural feature of language, one that it shares with metalanguage. Helmer,

we may recall, suggested that metalinguistic abilities are a pre-condition for the use of metaphor. While Helmer may be correct, it is certainly the case that we have many skills and capabilities for which we have no understanding on a theoretical or even descriptive level. Although I can run, I might have great difficulty in answering questions about how I run. Although a child may have difficulties with a metalinguistic question concerning the multiple applicability of a word, this does not necessarily preclude the possibility that the child will make proper use of metaphor, just as he or she properly applies the same term to different sorts of things. Helmer's claim is suggestive, but it is not conclusive. What is suggestive is the connection between metaphor and metalanguage, one which has now reoccurred in Hjelmslev's semiotics. It seems more than mere coincidence that children lack both metaphoric and metalinguistic skills.

Both metaphor and metalanguage result in what I have called second-order signification. Such structures indicate that a signifier or expression-sign can be severed from its signified or content plane, so as to elaborate on the one or the other plane, yielding on the level of expression, metaphor, and on the level of content, metalanguage. Both processes involve a certain stance toward language: that it is permissible to break up the otherwise indissoluble unity of the sign. Very young children do break up this unity in their play with sounds; rhyming, reduplication of syllables, nonsense sounds evolving out of sense sounds. But no linguistic meaning, no semantics is given to the verbal play--to the severance of the expression and content levels. In both metaphor and metalanguage the unity of the sign is dissolved in order to

introduce a new level of meaning. This must apparently await a relation to language more sophisticated than that of a child, who is just consolidating his skill in language.

The particular scheme of denotative, connotative, and meta-linguistic systems we have outlined concerns the various possible relationships between the expression and content planes of sign systems. It provides a framework wherein the meaning of a metaphor is something other than a deviant form of literal language. The apparent deviance of metaphor marks it--sets it off from ordinary signification--forcing the mind to detour, as it forces linguistic detours. But the second-order signification of metaphor is no more deviant than that of metalanguage (which has markers of its own), a form of signification we could scarcely do without. Second-order signification is a systematic development of the signification of a denotative sign. In this way we have found a means by which to integrate metaphoric meaning into a general theory of signification.

The Pre-Condition for Metaphor

At this point we may want to ask, do all denotative semiotics possess the possibility of generating a connotative semiotic? Another way of stating this question is to ask "What is required of a language for it to allow for metaphor?" This question is, one might say, the complement to the question dominating the discussion in this chapter, namely, "What is required of a utterance for it to be a metaphor?"

In order to answer our new question, I propose that we look at an extremely restrictive denotative semiotic, the notational system whose

conditions are outlined by Nelson Goodman in his study of symbol systems in *Languages of Art*. Although Goodman fixes on a different set of classificatory and explanatory apparatus than that used by Hjelmslev, the two models can be coordinated. Goodman, in developing a theory of notation, uses musical scores as a paradigm for notational systems. A notational system is denotative--both in Goodman's and Hjelmslev's sense. A musical score has a level of expression (or characters), the bars, clefs, whole notes, half-notes, quarter-notes, etc., stops, sharps and flat signs, etc. and a level of content (or realm of application) tones, rhythms, durations, i.e., the components of a musical composition and the composition itself. The expression level Goodman terms a symbol schema, while the expression and content levels, taken together constitute a symbol system. A symbol system can have a notational schema without being a notational system.

For both levels of expression and content, Goodman sets forth a number of requirements which will generate a notation: on the plane of expression these requirements are syntactic, in particular syntactic disjointness and syntactic differentiation, and on the plane of content they are semantic, in particular semantic disjointness and semantic differentiation. A fifth requirement concerns the application of the expression level to the content level; it stipulates that the system must be nonambiguous. Redundancy, another feature of application, is strictly speaking not permitted in a notational system, but it is in fact harmless.³⁹

³⁹ Notice that ambiguity and redundancy are in a sense inverses of one another. Nonambiguity requires that an element or feature of the expression level have only one corresponding element or feature on the content plane. Nonredundancy requires that any elements on the content plane have only one, if any, corresponding elements on the expression plane.

Elements of the expression plane are called "characters" and are defined as classes of marks or inscriptions or utterances. The syntactic requirement of disjointness states that no mark or inscription or utterance may belong to more than one character. That is, in a notational schema the characters are such that two marks of the same character must each be true copies of the character and of each other. This "character-indifference"⁴⁰ among instances of each character guarantees that the characters are disjoint classes. Our alphabet is an example of a disjoint set of characters.

The second requirement of a notational schema, that it be differentiated, or "articulate," is formulated by Goodman as follows:

For every two characters K and K' and every mark m that does not actually belong to both, determination either that m does not belong to K or that m does not belong to K' is theoretically possible.

That is, a notational schema cannot consist of a set of marks which form a continuum so that it is impossible to determine which of two characters any given mark belongs to. While the elements of the expression plane are characters, the elements of the content plane are compliance-classes. In a notational system, not only must the characters be disjoint, but the compliance-classes must be disjoint as well. This is the requirement of semantic disjointness. It disqualifies natural language, most of whose terms denote classes which overlap with one another, from being a notational system. Thus in a notational system, if 'Englishman' belongs to

⁴⁰ "Two marks are character-indifferent if each is an inscription (i.e., belongs to some character) and neither one belongs to any character the other does not. Character-indifference is a typical equivalence relation: reflexive, symmetric and transitive . . . a character in a notation is an abstraction class of character-indifference among inscriptions" (*Languages of Art*, p. 132).

the system, "doctor" could not. Clearly all relations of species and genus would be eliminated as well.

Semantic finite differentiation is the final requirement:

For every two characters K and K' such that their compliance-classes are not identical and every object h that does not comply with both, determination either that h does not comply with K or that h does not comply with K' must be theoretically possible.

Semantic finite differentiation also disqualifies most natural languages from being notational systems. For example, it is not always possible to say of an object with roots, leaves and branches whether it is a tree or a shrub. These two terms mark a continuum. Of course, in certain technical discourse we could set the conditions whereby "tree" and "shrub" are given complete articulation such that for any given object, we could specify that it is not a tree or it is not a shrub. Ordinarily, "tree" and "shrub" are partially differentiated. Such "partial differentiation" will not do for notations, but does characterize much of natural language. Most terms of natural language can be defined to clearly specify a portion of their denotative class, but will be indeterminate with regard to a portion of that class and a related class. This constitutes the "fuzziness" of which Lakoff speaks in his use of fuzzy set theory to handle terms from natural language. Natural language certainly manifests some differentiation of the continuum of experiential reality, but that differentiation is not as complete as is required in a notational system.

These five (and with redundancy, six) conditions provide various possibilities for distinguishing among denotative symbol systems. A given denotative system may satisfy some conditions and not others.⁴¹

⁴¹ Goodman has an interesting set of observations resulting from applying these conditions as criteria for languages employed in various technical and artistic mediums.

One could say that a notational system constitutes a limit of denotative systems--the most stringent denotational system, whereby we can not only identify precisely what is denoted by knowing how to read the expression level, but we can also identify just what the expression level will look like (except for the trivial contingencies of redundancy) given a certain content to be expressed. As Goodman says, in ordinary discourse "a good definition always unequivocally determines what objectives conform to it" but "a definition is seldom in turn determined by each of its instances." The latter is required of a notational system. It is a requirement even stronger than what is often demanded of an "ideal language." Frege, for example, laments that ordinary language is not what it might really be, one in which a sign has only one sense which picks out just one referent. Frege desires univocity only in one direction. Notational systems are univocal in both directions.

As we begin to violate some of these five requirements we arrive at a denotational language which more closely resembles natural language. In natural language we certainly have ambiguity and we lack semantic disjointness and semantic finite differentiation, although both disjointness and differentiation are present to some degree. On the level of expression most, if not all natural languages employ a notational schema, i.e., are syntactically differentiated and disjoint. Sometimes, however, we will violate differentiation. In English, for instance, we will occasionally say to a child, "that was biiiig," elongating the word "big" and usually lowering our voices as well. This is a particular deviation from our normally well-differentiated discourse.⁴² We can,

⁴²In some puns one plays with phonemes in such a way as to dissolve the normal finite differentiation and disjointness of our usual phonemic

however, imagine a language using a less completely differentiated schema for normal discourse. If, for example, in order to indicate size, duration, length, etc., we would elongate or shorten some appropriate phonemes or raise or lower their pitch, then the symbol schema would be dense⁴³ at those points.⁴⁴

If notational systems are denotative only and if we are correct in claiming that metaphors are connotative, then it follows that there can be no metaphors formed in a notational language. But rather than prejudge the issue on such a priori grounds, let us consider it afresh. Are notational systems capable of generating metaphors? It seems quite clear that they are not. In fact, we may say that notational systems not only constitute a limit for denotation, but also for metaphor. For what would it mean to make metaphor in a notational system? Let us consider the question with regard to a musical score. One might suggest that we can make metaphors in music by using high notes to express happiness and low notes to indicate sadness. But here we have imported secondary content planes, the content plane of the emotions happiness and sadness and an associated lexical set "high" and "low." In this case we are using a connotative structure which has on the expression

⁴²(cont.) - system. For instance,
 If I were pun-i-shed
 For every pun I shed
 I would not have a puny shed
 In which to lay my punished head.

⁴³A "dense" scheme is undifferentiated in the extreme.

⁴⁴I owe this suggestion to Robert Schwartz.

level a notational system.⁴⁵ But what would it be like to construct a metaphor within the confines of the notational system Goodman attributes to a musical score, that is, using only characters of notes, durations, etc. and the compliance-class of tones, durations, etc.

First, our metaphor must satisfy the necessary condition of all metaphor: it must involve a conceptual or semantic incongruity of some sort. Indeed, it is not difficult to speak of musical composition as governed by selection restriction rules. To the extent that a musical piece establishes a tonality, the listener is led to expect a certain set of notes and not others. For example, in the key of C, one would not expect to hear a sharp or a flat. When such a note occurs it is a surprise and the listener must interpret the anomalous note. The listener may discount the note completely as an error, or consider it to be only an accidental, a temporary stylistic embellishment, or see it as the beginning of a modulation into a new key. The last case is equivalent, in a tonality, to "feature addition or deletion." If in the key of C we interpret an F# as the first definitive step in a modulation to the key of G, then we have deleted F natural from the series or range of expected tones. This, however, is not a metaphoric process. In the metaphor, two meanings persist together and work upon one another:

⁴⁵ There are undoubtedly many very interesting connotative semiotics which employ a notational system on the level of expression. If the system of integers constitute a notational system, then numerology, which assigns to numbers an additional content, is such a connotative system. More respectable phenomena, such as programmatic music, may also be a connotative semiotic of this type.

"the child-bearing" moon, although childbearing, is still the inanimate moon. Once in the key of G, however, the key of C is behind us and forgotten; no tension persists between the two tonalities. If two keys could be signified simultaneously then the note which violated a selection restriction rule would also be a metaphor.

But, in fact, musical scores are not read in this way. The anomalous note does not hold us in two different keys at once, but transports us from one key to another. Moreover, scores cannot be read so as to yield metaphor, for then a given character would denote two compliance-classes simultaneously, one belonging to the key of C and one belonging to the key of G, violating either the condition of semantic disjointness or of non-ambiguity: the former if we consider the two compliance-classes as not disjoint, the latter if we consider them to be disjoint.

The above argument suggests that a language or a semiotic in which metaphor can occur must violate either the condition of non-ambiguity or semantic disjointness. Must it violate any of the other conditions set for a notational system? The syntactic conditions may certainly be satisfied by a language in which metaphor is possible, as is evident by the fact that natural languages use notational schemata such as the alphabet. However, there are visual metaphors, in painting and film, media which do not use schemata which are notational. Thus the syntactic conditions of disjointness and finite differentiation seem to have little consequence for determining whether a language is suitable for metaphor. The presence of semantic finite differentiation appears to have no direct bearing on the possibility of metaphor. Consider the two terms "man" and "reed."

They satisfy the requirement of semantic finite differentiation, as their compliance-classes are not identical, and for any object h which is not both a man and a reed we can always decide whether h does not belong to "man" or h does not belong to "reed." Yet one can make the metaphor "man is a thinking reed." However, whether one can make metaphors in a system that is semantically dense throughout is another question still, and I would venture that some degree of semantic differentiation will be necessary to make at least striking metaphors.

What about semantic conjointness⁴⁶ and ambiguity? Are they necessary conditions for metaphor? (They are certainly not sufficient conditions.) Ambiguity, as we have argued earlier, is distinct from metaphor. But the question we are asking now is whether one can have metaphor in a system that does not permit ambiguity. The answer, I believe, is yes, as long as the system is not entirely semantically disjoint. A system which permits ambiguity must, it would seem, have means by which to disambiguate the utterance made within that system. If, for example, there were no means in English to disambiguate the mark "bank," then there would be no reason to think that "bank" has more than one meaning and one would be forced, no matter how counterintuitive it seems to us who have a means to disambiguate this term, to consider all the instances of what is labeled "bank" to belong to one compliance-class. Thus one might say that a language which prohibits ambiguity is simply a more efficient one than a language which permits ambiguity. The presence of ambiguity does not, I believe, theoretically change what

⁴⁶ I take semantic conjointness to be the opposite of semantic disjointness, just as density is the opposite of finite differentiation. If a system is semantically conjoint, at least some of its classes overlap with one another.

can be stated in that system. Thus, if a metaphorical statement can be made in an ambiguous system, it should be possible to make that statement in a nonambiguous system. Ambiguity opens no doors for metaphor. And this is so in spite of the fact that at first glance it seems most likely that a notational system could not have metaphors within it because it proscribes ambiguity.

Semantic disjointness, it turns out, is in fact the critical reason why notational systems cannot generate metaphors. Semantic disjointness is the condition that no two classes of the system intersect. In ordinary language this translates into a prohibition against statements of the form "an A is a B" where A and B are distinct terms whose denotata are not identical, e.g., "a horse is an animal." And indeed within the system of musical notation there is no way to make a statement of this form. But all metaphorical statements, regardless of the grammatical form they take, can be reformulated as expressions of the form "some A is a B" or "all A's are B's" (assuming only that it is sufficiently evident what both A and B are). Thus one can say that all metaphors presuppose the possibility of being able to say of two classes that they intersect. Although we have arrived at this conclusion by the circuitous route of notational systems, what we are again encountering is the fact that metaphor is essentially a mode of categorizing, a means of putting something in perspective by placing it within a class or subsuming it under a category. Metaphorical statements take the form of statements not permissible in a notational system. As a consequence of their semantic disjointness, notational systems exclude the possibility of discovering or positing unifying relationships among its denotata.

Of course metaphor is not an ordinary form of classification: it categorizes by means of a "perspectival incongruity," to use Kenneth Burke's term. The possibility of semantic conjointness is then only a pre-condition for metaphor. And it serves as a pre-condition for two reasons: it allows statements of the form "an A is a B," and it allows the possibility that a single thing may be placed in two classes simultaneously. It is by virtue of the latter fact that a denotative semiotic may be converted into a connotative semiotic, for it is then possible to ascribe to a single signifier two content planes simultaneously.

But it is a pre-condition only, because one can ascribe to a single signifier two content planes simultaneously without the consequent sign being a metaphor (or an ambiguity in the sense that we must choose between "alternative reactions"). A similar situation arises when a given referent is identified by a single name which has more than one sense. I am here adopting the admittedly controversial position of Frege (in "Sense and Reference") that proper names have senses. We can say, following Frege, that a proper name such as "Aristotle," although it denotes only one referent, may refer to Aristotle as he was the teacher of Alexander the Great or as he was the pupil of Plato. This is a type of ambiguity. But the two classes, the class of teachers of Alexander the Great and the class of pupils of Plato need not be disjoint. Thus the single signifier "Aristotle" denotes a referent belonging to two differentiated but not disjoint classes; thus we can say that the signifier "Aristotle" has two content planes, the concept of the teacher of Alexander the Great and the concept of the pupil of Plato. Because of the multifarious ways in which we classify the objects of our experience in natural language,

there are few, if any proper names of which we cannot say the same thing.

As Frege insists, the fact that we can assign to a proper name several distinct senses also allows us to make cognitively valuable, that is informative identity statements, such as "the teacher of Alexander the Great is the pupil of Plato." And this, as we have pointed out, is precisely what is not possible in a language such as a notational system in which we have the requirement of semantic disjointness. But in the case of this polysemy, made possible by the violation of semantic disjointness, there is no incongruity involved in conjoining the two classes. They are both properly applied to the referent of the proper name: there is not incongruity in claiming that a member of the class of teachers of Alexander the Great is also a member of the class of pupils of Plato. Metaphor, in this regard may be called an "improper name." For in the case of metaphor the two contents assigned to a given signifier are two concepts (or, for the purposes of the present discussion, classes) which are only improperly conjoined, as when we say that "Man is a thinking reed." The class of men and the class of reeds are normally disjoint and only by virtue of an "improper" predication do we claim that a member of the class of men is also a member of the class of reeds. It is by virtue of the incongruity that the two content planes are not conflated, for this incongruity guarantees that the two classes implicated are, outside of the metaphoric identification, normally disjoint.

Now, by virtually a dialectical turn, we have discovered that semantic disjointness cannot be completely proscribed if a system is to generate metaphors. Unlike ordinary classification, metaphoric classification involves a dialectic between conjointness and disjointness, a

"perspectival incongruity" possible through the structure of a connotative semiotic.

Part II. The Theory and Its Implications

Chapter IV
The Linguistic Play of Metaphor
and its Conceptual Work

I have made the claim that metaphor is perspectival. Of course this claim itself involves a metaphor. Some have claimed that because of the way in which metaphor permeates our language, a metaphorical treatment of metaphor is inevitable.¹ But this should not hinder us, since as Richards suggests, it is by explicating metaphors that they become valuable to our understanding. Thus I make no claims to speak 'literally' of metaphor. Rather I hope to explicate those metaphors which seem most perspicuous.

In the foregoing discussion, my attempt to explicate the metaphor of "perspective" began with the investigation of the tenor-vehicle approach used by Richards: the vehicle is taken as the perspective from which to view the tenor. But this approach proved to be inadequate and thus we turned to Max Black, for whom the subsidiary subject and its associated system of commonplaces serves as the lens by which certain properties of the principal subject are made predominant while others recede. We found Goodman's emendations and reformulations of Black's proposals more satisfactory, in that Goodman allows for a system associated with both the principal and subsidiary subjects and regards these systems not as systems of associated commonplaces but as sets of labels and realms of application. But Goodman's views, which reflect his staunch extensionalist position, fall short just because of

¹ See Jacques Derrida's "White Mythology: Metaphor in the Text of Philosophy," trans. F.T.C Moore, *New Literary History*, 1975.

this extensionalism. Metaphor, I have argued, can best be explained on an intensionalist semantics.

The intensionalist semantics I adopt is a modified version of the interpretive semantics of generative grammar. But interpretive semantics alone does not seem capable of accounting for metaphor, nor do other rival intensionalist semantics of contemporary linguistic theory. To the "standard" semantic theory, I have appended a theory of semantic fields. Or rather, I have embedded at least a major portion of the apparatus of the theory of interpretive semantics into a theory of semantic fields. Because semantic fields provide paradigmatic and syntagmatic relations so important to an understanding of metaphor, they will play a crucial role in my conception, replacing the "set of labels" and "realm of application" in the extensionalist semantics of Goodman. I will use these fields together with the notion of a connotative semiotic to explicate what I understand to be the perspectival character of metaphor.

Metaphor always involves two semantic fields, or more precisely one semantic field including both a lexical set and a conceptual domain, and the conceptual domain from some other semantic field. The first semantic field serves as a perspective from which the second conceptual domain is re-viewed, revised, reorganized and reoriented. Because a sign which belongs to a semantic field is used to signify some other conceptual content, we have a connotative structure. A connotative semiotic is particularly well-suited to elucidate the "perspectival" metaphor of metaphor because it allows for the duality of metaphor to be expressed in terms of the biplanar structure of signs and thus does

not admit of that conflation of the dual contents towards which all other analyses have tended. It portrays the separateness of the two content planes and will allow us to elucidate the relation between them and the expression plane by which they are manifest.

A New Terminology

We have argued that for a sign to be a metaphor, it must be a discourse which is intended² to be semantically or conceptually incongruous with its semantic environment and which has two contents covered by a single signifier as in a connotative semiotic. The incongruous portion of discourse we have called the focus or metaphor itself, and the surrounding discourse we call its frame. The metaphor and frame together constitute the metaphorical utterance. The connotative semiotic of metaphor must be appropriately decomposed, characterized and named in order to be useful in further discussion.

I will call the metaphor the principal sign with a principal expression plane and a principal content plane. The sign which occurs on the principal expression plane I will call the manifest sign which has a manifest expression plane and a manifest content plane.

(See diagram below.) The names I assign to this latter sign are

<u>Metaphor:</u> metaphor (principal sign)	manifest sign (principal expression)	manifest expression
	principal content	manifest content

<u>Example:</u> Bees	Bees	biyz
	Workers	apian beings

²The intention may be explicit, or merely implied by the conventions governing the discourse. (See Chapter III, p. 133-136.)

motivated by the fact that this is the sign which is evident in the text.

In the metaphorical utterance "Wherefore Bees of England forge / Many a weapon, chain and scourge,"³ "Bees" is the metaphor and "Wherefore _____ of England forge / Many a weapon," the frame. The word "bees" I will call the manifest sign when we consider this word in its usual denotative sense: that is, when we consider it as a sign which has on the plane of expression the phonemic sequence /biyz/ or the orthographic sequence b e e s, and on the content plane the concept of apian beings. This word, however, taken as a metaphor, is the principal sign which has the denotative "bees" on its expression plane. On the principal content plane, we have the idea of the workers (of England). The content and expression planes do not however consist of these isolated bits of sound, or conceptual content. These planes I take to be constituted by the fields, semantic, lexical and conceptual, of which I have spoken. The expression plane of the principal sign is then the semantic field of the entire manifest sign. The content plane of the principal sign is the conceptual field of the frame of the metaphor, e.g., it is the workers of England who "forge many a weapon . . .," and it is the semantic field of those

³For the purpose of this analysis I will deal only with the term "bees." "Of England" could be construed as either a literal or a figurative collocation, for although one rarely identifies bees by their national origin, there is nothing particularly incongruous with saying "bees of England" if one really means those bees found in England. But because the single lexical item "bees" is simpler to deal with than the syntagma "bees of England," I will for the moment take "of England" to be part of the frame of the metaphor.

workers which provides the "formed content" of the conceptual field entering into the metaphor. (See diagram below.)

Connotative System:

Metaphor	Semantic field of manifest sign	Lexical field of manifest sign
		Conceptual field of manifest sign
	Conceptual field (of a semantic field other than that of the semantic field of manifest sign)	

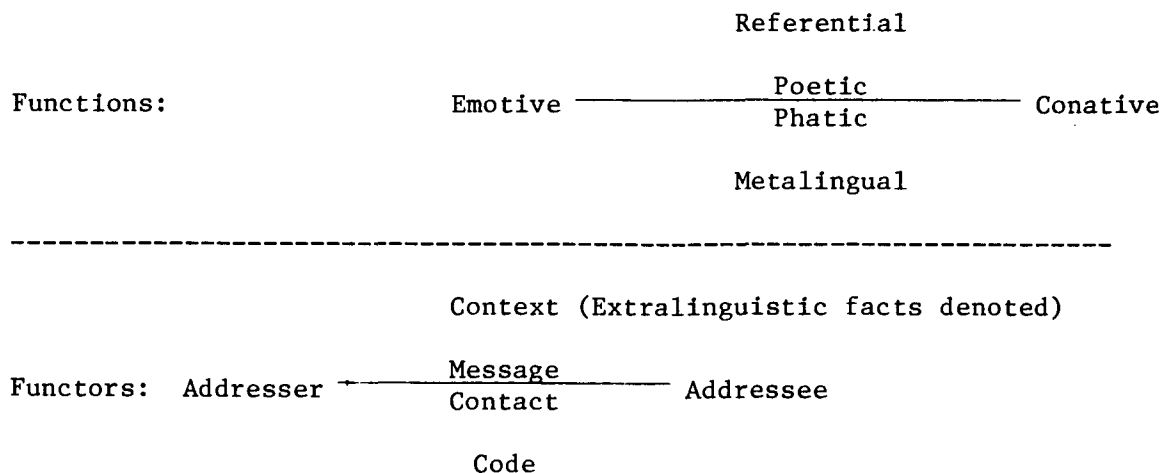
Our terminological scheme corrects some deficiencies in previous efforts. The relation between the manifest sign and the context is specified so as to make it at least theoretically possible to disambiguate the frame-focus ambiguity in metaphor. The word or words actually used to make the metaphor are included and identified, and both "tenor" and "vehicle" are associated with a field, so that they are not presented as isolated ideas. But most importantly, our schema provides the means by which to talk about how the "two parts" of a metaphor interrelate: to specify how the semantic field of the manifest sign reorders the conceptual field of the primary sign. What sort of reorganization of conceptual domains takes place? How does it occur? How is it even possible? These questions will concern us in the remaining portions of this essay. We will take up the last one first.

The Play of Signifiers

In order to understand how the semantic field of the manifest

sign restructures the other conceptual field of the connotative semiotic, we must turn our attention to a related but somewhat different phenomenon. Metaphor, although not exclusive to poetry, is closely associated with the poetic possibilities of language. Correspondingly, by understanding something about the poetic use of language, we will come closer to understanding what makes metaphor possible, even in non-poetic discourse. Roman Jakobson has suggested that the specifically poetic function of language is a focus on the message⁴ itself. He writes that a poetic utterance is "quite

⁴In his article "Closing Statement in Linguistics and Poetics," in T.A. Sebeok, ed., Style and Language, (Cambridge, Mass.: MIT Press, 1960), Jakobson characterizes six primary uses of language which correspond to six functors. Depending on which of the functors predominate in a particular discourse, the language is primarily emotive, referential, etc.



In the referential use of language an addresser using the established code (that is the language mutually understood by himself and the addressee) makes contact with an addressee and delivers a message. The message conveys the context to the addressee. Attention is directed

simply an utterance pointing at its own expression."⁵

This attention to the message as it is expressed is directed primarily to the signifier and the system of which it is an element. Thus in its poetic employment, the sign's signifier loses what

⁴(cont.) - essentially toward the context with little concern for who the addresser and addressee are, and with no reflection either on the code, or on the form which the message takes. But as we know, the denotative is not the only, nor even the "ordinary" function of language. Austin called our attention to another ordinary use of language, the performative. In a performative, the focus is on the relationship established between the addresser and addressee via the verbal message. The statements about logic and linguistics are statements about the code employed. They are metalinguistic uses, as are such common expressions as "What does this word mean?" The normal response to picking up the telephone, "hello," is an attempt to establish the lines of communication, to establish contact. This Malinowski called the phatic function of language. The purely emotive role is characterized by the interjection, though, as we know, many words which are near synonyms differ primarily in their emotive import. In addition, the same bit of language may, by the tone in which it is delivered, take on drastically different emotive characteristics. The conative function, which is involved in all performatives, is most strikingly illustrated by the imperative mode of address. The force of the utterance is primarily directed to the person (or thing) addressed. Jakobson points out that various forms of verbal magic also fall under this conative function. For the poetic function, see text above.

⁵Quoted by Tzvetan Todorov, "Literature and Semiotics" in *The Tell-Tale Sign, A Survey of Semiotics* ed., T.A. Sebeok, (The Peter De Ridder Press, Netherlands, 1975)

The poetic function, however, is not limited to its appearance in poetry. Jakobson illustrates:

"Why do you always say Joan and Margery, yet never Margery and Joan? Do you prefer Joan to her twin sister?" "Not at all, it just sounds smoother." In a sequence of two coordinate names, as far as no rank problems interfere, the precedence of the shorter name suits the speaker, unaccountably for him, as a well-ordered shape of the message.

("Linguistics and Poetics," p. 359.)

Nor, of course, is language as used in poetry directed exclusively toward itself.

linguists refer to as its "opacity." Pure signifiers are opaque in that nothing can be read off them; they are isolated figurae or figurae strung into syntagmatic chains, uninterpreted symbols, as a logician would say. But even uninterpreted symbols, or figurae, if they are part of a symbol system, have rules governing both their syntactic formations and the paradigmatic relations by which they are differentiated. When these rules are exploited for the manipulation and juxtaposing of signifiers without specific regard for the consequences resulting when these strings are interpreted, we have what has, in structuralist discussions, been called a "play of signifiers."

In poetry, the play of signifiers is particularly evident. The sounds, if they are sounds of words, can be divorced from what they signify in analysis only, not in practice, unless the sound loses its status as signifier and becomes merely an acoustic phenomenon. Thus while we can play with the signifier, the play inevitably has some consequences on the level of content. This is to say that when the relations within a paradigm, which relate to the identity and the difference of the constituent element, become the principle organizing the syntagmatic chain of signifiers, these relations are projected by the listener or the reader onto the semantic elements which, therefore, adopt the relations among the signifiers. In this way the relations among the signifiers take on semantic import.⁶ Jakobson illustrates with lines from Poe:

⁶Jakobson has described this process by saying that "equivalence in sound, projected into the sequence as its constitutive principle, inevitably involves semantic equivalence, and on any linguistic level any constituent of such a sequence prompts one of the two correlative experiences which Hopkins neatly defines as 'comparison for likeness' sake' and 'comparison for unlikeness' sake.'" ("Linguistics and Poetics," p. 368-9.)

And the raven, never flitting, still is sitting, still is sitting
On the pallid bust of Pallas just above my chamber door

In these lines we are implicitly aware of the consonant reversal in raven (r.v.n) and never (n.v.r), in the rhythmical identity of "never flitting" "still is sitting" and in each case we draw a semantic relation (between "raven" and "never", between "never flitting" and "still is sitting"). Jakobson further illustrates the principle enunciated above with the second line. He writes:

The perch of the raven, 'the pallid bust of Pallas' is merged through the sonorous paranomasia /pœld - pœls/ into one organic whole (similar to Shelley's molded line "Sculptured on alabaster obelisk /sk. lp/ - /l.b.st/ - /b.l.sk/) ("Linguistics and Poetics," p. 371)

What we have said is that by exploiting certain relational features among signifiers, we effect new relations among the signifieds. A dramatic example of this is provided by literary critic Jonathan Culler. He points out that even the graphic convention in poetry, in which the verses are indented (a feature of the plane of expression), has grave consequences for the manner in which the same words are read:

If one takes a piece of banal journalistic prose and sets it down on a page as a lyric poem, surrounded by intimidating margins of silence, the words remain the same but their effects for the readers are substantially altered.

Hier sur la National sept
Une automobile
Roulant à cent à l'heure s'est jetée
Sur un platane
Ses quatre occupants ont été
Tués.

(*Structuralist Poetics*, Ithaca, New York, 1975, p. 171)

"The poem," says Culler, "is a structure of signifiers which absorbs and reconstitutes the signified." Such absorption and reconstitution, while intrinsic to poetry, is not exclusive to it. Rhetorical discourse,

discourse which aims to persuade (and in advertising to sell), is also characterized by this process⁷, although unlike a poem such discourse does not attain the self-sustaining status of a "structure" -- that is, for poetry this process results in an artifact which is self-sufficient, whereas in rhetoric it is only the means of persuasion. In poetry we use the signifier in the play of signifiers to make possible new discoveries among the signifieds; in rhetorical discourse, we use it not for exploration but for a "tracking" -- setting the reader onto a pre-given track. Just because poetry is an exploration, its play of signifiers can be far more bold than that possible for "persuasive" discourse.

We have moved from poetry to rhetoric in order to exhibit the range in which one may effect a "play of signifiers," but in so doing we have taken a step further away from cognitive discourse. When we consider language more clearly employed for cognitive purposes, do we also find such a play of signifiers? Indeed, what the formalization and axiomatization of mathematical and logistic systems have shown is that these areas are largely characterized by a play of signifiers. Let us take symbolic logic as an example. Symbolic logic can be characterized as a set of symbols with certain syntactic rules governing their formation into syntactically well-formed strings, and other rules governing the manipulation of those strings, whereby one of a binary set of values is preserved through the manipulation. In addition, a set of statements of symbolic logic can be given an interpretation which constitutes the semantic component of the system. In this interpretation, the various symbols are given a semantic content and

⁷See Jakobson's analysis of the political slogan "I like Ike," in "Linguistics and Poetics," p. 357.

the statements become true or false. The rules governing the manipulation of the well-formed strings will always preserve truth. If the interpretation does not make all the sentences of the set true (that is, give us a model), then we would not consider the semantics to be an appropriate one.

The uninterpreted system may be considered a system of signifiers in much the same way that the system of phonemes is a system of signifiers (with one crucial difference of which we shall soon speak); i.e., there are rules governing the construction of syntagmas (strings of symbols) and rules constituting paradigms (elements which are substitutable for one another while preserving well-formedness). The paradigmatic sets, although utilized in setting up an axiomatized system, are rarely explicitly recognized as such, but the rules of their formation are as undeniable as those governing the syntagmatic system. These paradigms include, for example, a set of individual variables which, in sentential, though not in predicate logic, are completely substitutable; a set of predicate variables (in predicate logic) which are ordered in terms of the number of individual variables with which they can be collocated in a syntagma; a set of quantifiers (in predicate logic) whose rules govern their interchangeability relative to the preservation of the binary set of values; and a set of symbols which serve as connectives governed by rules establishing the equivalences among these connectives. The syntagmatic rules govern how the elements from these paradigms may combine, thus establishing the criteria for well-formedness.

With the combined set of syntagmatic and paradigmatic rules, we

can generate indefinite strings of well-formed formulas. And even before we interpret these strings we can learn certain things about their properties and interrelations, such as the consistency of the system.

Now while it is unlikely that any logician, even Hilbert himself, would do nothing more than manipulate these uninterpreted strings, it is fairly clear that some part of the activity of a logician involves just such formal "play." This manipulation of uninterpreted symbols allows for the discovery of new relations, not only among the signifiers themselves, but, given the appropriate interpretation, among the semantic elements, the elements which provide the interpretation. The obvious, but nonetheless crucial, point is that the semantic relations are arrived at, not by working within the semantic component, i.e., the signifieds, but by carrying forth the consequences of the rules governing the signifiers. Thus just as in poetry, when we fuse the raven and its perch by virtue of the "sonorous paranomasia" of Poe's line, we can often hit upon the proof of a theorem by ignoring all but the formal constraints.

To speak of a formal system such as an uninterpreted, axiomatized logical system as a system of signifiers calls for one important modification. A system of signifiers, such as the phonemic system which serves as a model for signifiers generally, is one whose basic elements neither bear meaning nor are capable of bearing meaning in the system except insofar as they are formed into higher units, e.g., morphemes, and can be semantically free-standing only when they become lexical items, i.e., words. The units of a system of signifiers should, properly speaking, be a system of figurae. The unit elements of the

sort we find in formal logical systems, however, are interpretable even without formation into strings: the tilde can be defined as negation, the wedge as inclusive disjunction, etc. Since they are potentially bearers of meaning they are not figurae. If, however, we understand "meaning" in logical systems to be what, in fact, many logicians consider it to be, that is the conditions whereby we assign a truth-value, then the uninterpreted calculus of logic begins to better resemble the system of phonemes. For "or" or "Tom" or a two-place predicate like "father of" have no more "truth-value" independent of their role in a well-formed formula than a phoneme has a signification outside of its role in a word. Thus we see that even a notion such as figura is relative to a system and the concepts employed therein.

A thorough investigation of the areas in which we find important uses of the exploitation of the system of signifiers to draw new relations among the signified would be an immense undertaking. It would appear that wherever we have signification, there we have signs which exhibit the biplanarity of expression and content, a biplanarity which is accompanied by the systematic interrelations among the elements of the expression plane as well as the systematic interrelations among the constituents of the content. And wherever you have elements related to each other in some systematic manner, that is by rules, you have the possibility of generating new relations among those elements. These conditions are the necessary conditions for the possibility of the "play of signifiers." Wherever these conditions are met, and they are met wherever we find a system of signs, there we may expect some activity which we can identify as a play of signifiers.

Although this activity is, in a sense, a natural outcome, a natural result of the internal structure of a sign and a sign system, we must recognize that to employ the signifier in this manner is a subversion of the aim and the purported function of a sign. From the point of view of its aim or function, a sign is defined as a "bearer of meaning." As a bearer of meaning, it is a unit -- only by means of an abstract analysis do we differentiate a signifier and a signified. These presumably do not stand on their own. The play of signifiers is subversive of the unity of the sign in much the same way that the possibility of a name or definite description which names or describes nothing is subversive of the referential function of language.

If we consider the process of signification to involve not two but three constituents, signifier, signified, and referent, organized as below,

sign	signifier
	signified
referent	

we see that there are two possible ruptures in the referential use of language. The most obvious is the rupture of the sign from its referent. All language used fictively partakes of this rupture. The fact that there are names which name nothing, intelligible descriptions which describe nothing that exists, has always presented a major challenge to those who identify meaning with reference and to those who insist on a purely extensional account of language. For if we say that the extension of the term "unicorn" is the null class, then

similarly the extension of "the present king of France" is the null class; but it appears clear that "the present king of France" does not mean the same as "unicorn." But even for those who insist on intensionality in language, intensionality is generally regarded as the conditions by which a referent is identified. Thus the intensionality of a sign (the signified) is seen as no more severable from the referent than the signifier is from the signified.

Yet it is precisely because signs do not exist only in relation to their referents, but also in relation to other signs, and are generated, not only by virtue of some referent needing to be named, but also by rules governing syntagmatic constructions (these rules, for example, generate definite descriptions which are without reference) and paradigmatic equivalences that we can have meaningful language which names and describes nothing existent. This language is generated by such rules and thereby demonstrates the first rupture, the sign from its referent. But similarly, the signifier is not only a signifier of some signified, it is also a signifier in relation to other signifiers. As such it too is governed by rules generating other signifiers and strings of signifiers which demonstrate the second rupture, that of the signifier from its signified.

Metaphor as a Play on the Plane of Expression

Having characterized metaphor as a connotative semiotic, we can see clearly the possibilities in this structure for something resembling a play of signifiers, but also something characteristically different from what we have thus far described as such. Signifiers,

relative to the signified, constitute the plane of expression. And metaphors, when they are developed and carried forth beyond a single word, exploit the system which is on the plane of expression of the connotative semiotic, namely the semantic field of what we have called the manifest sign. But the plane of expression which consists of genuine signifiers -- that is, a system whose elements do not have meaning and whose connection to what is signified is completely arbitrary -- is quite different from the plane of expression of a metaphor. On the plane of expression of a metaphorical sign we have not a signifier but something which is itself significant, or in Saussure's terms, something which has not only value but signification as well. Metaphor thus participates in the poetic function of language. The message itself, its expression plane, is foregrounded. But unlike many other poetic devices, e.g., alliteration, what is foregrounded is itself a complete sign, not a bare signifier.

We have seen how in poetry, rhetoric and logic, indeed wherever we have a play of signifiers, the arrangement and organization of signifiers can result in a reordering and rearrangement among signifieds. The play of signifiers can be used heuristically, even creatively for conceptual import. But consider what happens when such play takes place not among signifiers, themselves empty of meaning, but among signs, which themselves have conceptual content. When the signs are free-standing, presumably referential (that is, take the form of statements and referring expressions) and constitute a denotative semiotic, a "play of signs" is one which frees the sign from its referent: we then have fictive discourse. But if the sign is not free-standing, if it constitutes the expression plane of a connotative

semiotic, then a play of signs serves to reorganize a plane of content distinct from the content of its own signifier. And because this play is guided, not only by the non-conceptual signifier, but by the content plane of the signified, we have one conceptual⁸ content serving as the motivation for a reordering of a second conceptual content. It is this dual conceptual organizing, or double semantic move, as Henle says, that makes metaphor a cognitively important instrument. Later in this essay, we will see some concrete examples of such an interplay of content planes.

Metaphor as Motivated Sign

The fact that metaphor has on its expression plane a sign makes possible the cognitive potential in metaphor by means of a "play" on the expression plane. It also makes possible another cognitive feature of metaphor, one related to the idea of "motivation" in language. We pointed out earlier that language as it is usually used has an expression plane which is "opaque" -- opaque in the sense

⁸I am here identifying the content level with a conceptual content. This, however, need not be the case. The content plane may be occupied by what in another system constitutes the expression plane, as where the letters of the alphabet are taken to stand for certain phonetic information. The content plane can consist of anything that can be characterized as the information conveyed by the expression plane. When we deal with words, the content plane is conceptual. Indeed, wherever we have metaphor, we use signs which have on the content plane a conceptual content, regardless of the nature of the expression plane, be it linguistic, visual, auditory or even olfactory. It may be possible to conceive of metaphors which are constructed in such ways that either or both contents are not conceptual, but then they would not have a cognitive import and would not be relevant at this point in our inquiry. They may, however, be interesting for other reasons.

that, by regarding the expression-sign (that is, the expression plane of a sign), we learn nothing about the content. The expression-sign is arbitrarily chosen, though fixed by convention to express that given content. However firmly we hold to the dictum of William Dwight Whitney, that as for the "inner and essential connexion between idea and word . . . there is none in any language upon the earth," (quoted in Steven Ullman, "Natural and Conventional Signs" in *The Telltale Sign*, p. 105) natural language is not completely arbitrary. Certain motivation, or transparency⁹, does exist.

One may say that there are two types of motivation in natural language, direct and indirect motivation.¹⁰ Direct motivation is characterized by onomatopoetic effects which, in the case of primary direct motivation, involve those terms when the referent is acoustic (animal noises, "croak," "lisp," etc.) and secondary effects when the referent is non-acoustic. Whether

⁹I use the term "opaque" to denote arbitrariness and "transparent" to signify motivation with great hesitancy, since the terminology seems to me poorly motivated. I would prefer to call unmotivated expression-signs transparent in that they do not call attention to themselves but appear to do nothing more than convey their content, and motivated expression-signs "opaque" since one gets stuck at the level of expression with the distinct awareness that the content cannot be grasped pure and simple, but is mediated by the expression level. Unfortunately most Saussurian linguists (perhaps because they are too taken by "l'arbitraire du signe") adhere to the former practice and since only confusion can result from such a break with convention, I bow to their convention and abdicate my sense of proper motivation.

¹⁰In "Natural and Conventional Signs," (in *The Tell-Tale Sign*), Stephen Ullman gives a fairly complete inventory of the types of motivation we find in natural language.

there are such secondary effects for non-acoustic referents may be questioned, but some empirical studies suggest that there are. Non-English speaking French lycée students were told that "gleam" and "gloom" refer to light and darkness and were asked to match the labels with the concepts. All chose the correct meanings.¹¹

The more interesting motivation is "indirect." It is either morphological or semantic. Motivated morphological composition and derivation are illustrated by the formations: dreamer, dreamy, dreaminess, dreamless, undreamt of, dreamland, daydream.¹² By understanding the meaning of "dream," and by having encountered the various suffixes, prefixes and other lexical items from which some of these formations are constructed, we can approximate the meanings of newly-encountered terms of such a sequence. A day-dream is so-called because it is the kind of dreaming we do during the waking hours. Another example of morphological motivation is portmanteau formations like "brunch" and "smog."

Finally there is semantic motivation which is based purely on a semantic relationship and includes metaphor and metonymy. This semantic relation, claims Ullman, takes place between "two lexical items." But of what two lexical items does Ullman speak?

¹¹Notethat, not one, but two opposed terms were used, thus making the presumed motivation relative, not absolute. This experiment accords well with the "ping" and "pong" studies cited by Gombrich (*Art and Illusion*, Princeton: Princeton U. Press, 1969, p. 370) and Goodman (*Languages of Art*, pp. 75-76). Mallarmé's complaint that the French words "jour" and "nuit" misrepresent the phenomena which they signified (since the sound of "jour" is heavy and somber, while the sound of "nuit" is light and clear) is evidence that, the actuality of language notwithstanding, we expect this type of motivation.

¹²Ullman, *Tell-Tale Sign*, p. 106.

What he means to say is that the expression plane of the metaphor (the manifest sign) is semantically motivated with regard to the content plane of the metaphor (i.e., the principal content plane). If we understand "name of" to be as Goodman, in *The Structure of Appearance* (2nd edition, Indianapolis, 1956), defines it, a "predicate applicable only to" some given thing, then we may say that a metaphoric predication (or attribution) is an attempt by some speaker to find a motivated name for some x. The motivated name becomes the manifest sign; the x, or more properly the concept of that x, becomes the principal content.

We can see that in this regard even the most rigidified metaphor differs from other cases where we might ascribe two contents to a single signifier, that is, ambiguous and polysemous terms. In the latter cases, the various contents are not motivated by one another. But even if we consider that the term "leg" in the expression the "leg of a table" has lapsed into catachresis and carries simply as one of its definitions, "the support of a piece of furniture," that definition is motivated by the other sense of "leg" whereby it serves as "that part of an animal body which is used for support and locomotion." It is this interplay, this motivation among the senses, uninhibited by the need to choose among them, which ultimately distinguishes metaphor, in all its various stages, from ambiguity, in all its various manifestations.

Incidentally, the question we raised in a previous chapter -- whether we ought to call an utterance metaphoric only if *i* is intended or also if it is not intended as such -- is related to the issue of

motivation. (See Chapter 3, pp. 133-39.) At that time we attempted to distinguish mistakes from metaphors, concluding, perhaps a bit too dogmatically, that young children's nonconventional classifications are errors rather than metaphors. Yet many mistakes by children (and occasionally non-native speakers), such as calling a spaghetti sauce "blunt" instead of "bland," or those of a two-year-old who calls blueberries "blue babies" and lawn mowers "lawn motors," as well as the mistakes Percy cites (calling a blue-darter hawk a "blue-dollar hawk" and the Seeburg coin machine a "sea-bird") are disturbingly like metaphors. We can banish them as mistakes, but a sense of bad faith accompanies this verdict. In the case of Percy's examples, we invoked, with Percy, the authority vested in the speaker, or language community, which seems to replace the function served by intention. But the intentionality which informs and transforms odd or incorrect usage into metaphor is the intentionality to do what? It is the intention to find a properly motivated name, either to first name something unnamed, or to replace an arbitrary name. Hence, authority can replace intention for while the listener can construe the connection between word and thing such that the name seems motivated rather than arbitrary, the authority vested in the speaker confirms the connection. It is by his power that the word is then validated as a name.¹³ The mistakes of children lack both intentionality and authority, but they clearly reflect an attempt on the part

¹³ Insofar as a metaphor is a naming, a sort of baptism, it has some features of a speech act. See Lowenburt's attempt at a speech act analysis of metaphor.

of the speaker to name things in a way that "makes sense" to them. Children appear to have little difficulty in accepting "l'arbitraire du signe"--they call things by the names we call them and rarely question our wisdom in assigning to things the labels we do. However, children would fail to progress as quickly in their language learning if they regarded all signification as purely arbitrary, as being unguided by any generative principles. This perception is a commonplace when applied to syntactic formations in language, but it is equally, if not even more, pertinent for semantics.

Children, young children particularly, appear to break their world into pieces according to their language possibilities at the time. With five words at their disposal, their world is squeezed into five categories. As their language develops, so do the differentiations in the categories they articulate. A child who can only say mama will apply his or her precious word to all those who are close by, but once dada is firmly established, the identity of the person or persons to whom dada applies is clearly differentiated from those to whom mama applies. And so it goes.¹⁴ As the young child's language becomes more complex, the categories more differentiated, the question of motivation becomes more acute. The differentiation in adult language must be overwhelming for a child. The child has to pare down the multitude to a more parsimonious lot, one more easily assimilated. The partial motivation of all natural language provides the child with models for generating new words, new uses

¹⁴For a psycholinguistic study confirming this intuitive account, see Eve Clark, "What's in a Word? On the Child's Acquisition of Semantics in his First Language," in T.E. Moore (ed.), *Cognitive Development and the Acquisition of Language*, (New York: Academic Press, 1973).

of old words, and means for incorporating the many various labels into a smaller number of categories. So snow seen for the first time becomes "flour," and bland spaghetti sauce becomes "blunt" spaghetti sauce.

But the intentional use of metaphor involves the same principles, the use of old words to cover new ideas, new references (cf. "flour" for snow) and the generation of new word formations (particularly in the metaphoric form known as kenning:¹⁵ cf. blue-babies and lawn-motors). Even the principle of economy practiced by the child is an important part of metaphor. An extended metaphor is often used to help organize diverse elements into a unity more easily grasped by the mind.¹⁶ Moreover, as Goodman says, the economy of language afforded by all metaphors, even "tired" ones, is important. "If we could not readily transfer schemata to make new sorting and orderings, we should have to burden ourselves with unmanageably many different schemata, either by adoption of a vast vocabulary of elementary terms or by prodigious elaboration of composite ones" (*Languages of Art*, p. 80).

This use of metaphor, of semantically motivated naming and predication, to both generate new formations, new images, and to economize, constricting the number of terms and number of semantic fields employed, is probably most characteristic of any fervent growth period in the life of an individual or in the history of a discourse or field of inquiry. For it is through such fluid and experimental use of language and the accompanying conceptual apparatus that we can engage in the processes

¹⁵ A kenning is a metaphor which is a compound word or phrase such as calling the ocean "the whale's bath" or "sea-streets."

¹⁶ This is an extremely important cognitive function of conceptual models.

of assimilation of new data into our old schemata and accommodation of our old schemata to the newly impinging reality.¹⁷

The firmer the child's grasp on his or her language, the more the metaphor-like mistakes become like ordinary mistakes. This is to say that although a young child's language has a fluidity we associate with metaphor, an older child's language is more fixed. As the child struggles with his competence, the fluidity of metaphoric language must be threatening to the careful fixing of words and meanings. This we offer as an explanation, albeit speculative, for the results Helmer speaks of, that children tested between the ages of four and eleven do not use metaphors. But once the categories and classifications are fixed and the competence well set, experimentation can begin anew--now the citizen, well-versed in the rules of the language community, can intentionally, although only provisionally, break with those rules to explore and creatively express his or her thoughts. And only at this point do we have what we genuinely call metaphor. The early metaphor-like gropings involved the search for motivation in naming with a consequent transfer of semantic fields, often (interestingly so) guided by similarities between the "proper name" and the "transferred name" which exist on the level of signifier (babies for berries, motor for mower, blunt for bland). But the transfer was only a transfer of labels; the two content levels are quickly conflated, thus characterizing the denotative semiotic of a name used mistakenly rather than the connotative semiotic of a name

¹⁷ See Piaget, *Plays, Dreams and Imitation*, (trans. by C. Gattegno and F.M. Hodgson, (New York: W.W. Norton & Company, 1962)), for a discussion of "assimilation" and "accommodation." I am here approximately following his use of these notions.

used metaphorically. The intentionality in genuine metaphor keeps the two content levels distinct, and the motivation guiding the metaphor remains active throughout its life rather than a mere relic of its formation.

By regarding metaphor as a connotative structure, we can see with one stroke how metaphor is both a motivated use of language and a play on the level of expression. Moreover, it enables us to demystify the notion of a nonarbitrary sign. There is a tradition which regards the metaphorical use of language as the primal one, the one with historical as well as conceptual priority; Rousseau, Herder, Croce, Vico, and Cassirer among others hold this view. Insofar as metaphor is an attempt to gain hold of a "true" name--that is, a name not just arbitrarily assigned, but one which tells us what the object is--metaphor lives at the heart of all theories of language which would deny the conventionalist doctrine. But the naturalist doctrine that there are natural names, whose origins have been buried in the course of history, is belied by linguistic fact. However a certain sensibility to language, a sensibility attuned to the importance and potency of language, a sensibility not unrelated to the one which gives rise to word magic, ritual incantation, chanting and poetry itself, looks to the word, the name, as containing some truth yet to be revealed and some power yet to be activated. That sensibility takes all language which shows traces of motivation, both synchronic and diachronic,¹⁸ to bespeak a "natural language." Yet motivation in language, even the

¹⁸ We have been treating synchronic motivation. But we can also speak of diachronic motivation, which takes the form of both true etymologies and the false but revealing folk etymologies.

semantic motivation of metaphor, is in fact based on some relatively mundane generative principles. And all its motivation is intermingled with convention. Moreover, engaging in a play on the plane of expression is similarly a reflection of an importance given to the manner in which we name that of which we speak--as if the sound itself holds the power and truth of what it names, as if by arranging sounds we arrange things or at least the idea of those things. And in one sense this is true. It is true not because a given sound is the "natural" or true name of a thing and thus holds the power of that thing, but because the signifiers are systematically related, and so are the signifieds. Relations can hold among diverse things and can, therefore, be transferred from one realm to another. A play on the level of expression can involve a transfer onto the level of content of such relations--in this way we can effect a reorientation among the elements on the level of expression--and this is what happens in poetry. But an ancestor of poetry is word magic, and if we now imagine that the sound is not "an echo of the sense" but the "essence of the thing," we see how easily the efficacy of word magic follows as a consequence.

What I am doing here is a kind of reduction: I am reducing an assumed potency of language to a structural principle of language. But in this demystifying reduction I am also reorienting the focus in an examination of poetry, metaphor, word magic from the relations of sign to object, signifier to signified, to those relations holding among signs, among signifiers and among signifieds.

Motivation in metaphor may be primarily responsible for the choice

of semantic field we employ as the manifest sign for the principal content. But the efficacy of the metaphor, the effective motivation, is consequent upon the possibilities afforded for a play on the plane of expression of the metaphor, that is, for an exploitation of the relations of the semantic field of the manifest sign as a set of re-ordering principles for the principal content. In the chapter that follows I will proceed with analyses of three extended metaphors to illustrate such effective transfers.

Chapter V

I. The Transfer of Relations and the
Transforming of Semantic Fields

In the following pages I use a number of metaphors found in poetry and prose to substantiate the arguments made so far and to illustrate the way in which sense relations are transferred and semantic fields are transformed in the making of metaphor. Because there is no exhaustive semantic description of English (or any other natural language) such that one could look up the semantic fields of a word used metaphorically, I have found it strategic to work not with isolated but with extended metaphors. The extended application of a metaphor in a text gives us most of the relevant semantic field from which the manifest sign or signs are taken, sparing us the task of constructing the semantic field *ex nihilo*. In theory, the analyses I give to extended metaphors are applicable to single metaphors as well.¹

"The Bait"

The first case is a poem by John Donne, "The Bait," in which courtship is mockingly spoken of in terms of the extended metaphor of fishing. An extended metaphor makes clear the fact that a metaphor's development takes place on the level of expression, that is, on the principal expression plane, the semantic field of the manifest sign. As we will see, the metaphor develops precisely by playing out the relations among the elements of the semantic field of the manifest sign of the poem's title

¹ In the three analyses which follow, I was assisted by Adrienne Lehrer, who guided me in the application of semantic field theory to the particular examples used here.

"The bait." The term "play" seems especially apt for this parody of Marlowe's "The Passionate Shepherd." The poem is reproduced below in full and the markings I have added are explained in the key below.

The semantic field of fishing, as it is construed in this poem, is one which the relations are primarily syntagmatic. It would have to include the *Verb*, to fish; an *Agent*, such as fisherman; the *Patient*, the fish; and the *Instrument*, the hook, line, bait, etc. The first three elements, the *Verb*, the *Agent*, and the *Patient*, are essential to structuring the semantic field of fishing. Even in sentences where one of these three constituents do not appear in the sentence, that element is nevertheless tacitly understood. Consider the sentence I went fishing. It is presupposed that I went fishing for something, i.e., fish. Similarly in the sentence, The fish was caught, it is understood that someone or something caught the fish. The role of *Instrument* in this field is perhaps somewhat more uncertain. While we very often do not specify with what instrument we are fishing, fishing, unlike an activity such as thinking, involves an instrument of some sort. Even if we fish with our bare hands, our "bare hands" occupy the position of *Instrument* in the syntagma. Thus although *Instrument* is not as obviously a mandatory relation in the field of fishing as *Agent* or *Patient*, upon reflection we can see that it is, in fact, obligatory.

A more optional relation in the field of fishing is the *Locative*. There are some activities in which the *Locative* is obligatory--activities indicated by verbs such as to go, to come, to arrive. The notion of place is essential to understanding what is meant by these terms. Although the

Figure 1.

The Bait

Come live with me and be my love
 And we some new pleasure prove
 Of golden sands and crystal brooks
 With silken lines and silver hooks

There will the river whispering run
 Warmed by thine eyes more than the sun
 And there the enamoured fish will stay
 Begging themselves they may betray.

When thou wilt swim in that live bath
 Each fish, which every channel hath
 Will amorously to thee swim,
 Gladder to catch thee, than thou him.

If thou, to be so seen, beest loth
 By sun or moon, thou darkenest both;
 And if myself have leave to see
 I need not their light, having thee.

Let others freeze with angling reeds
 And cut their legs with shells and weeds
 Or treacherously poor fish beset
 With strangling snare, or windowy net

Let coarse bold hands from slimy nest
 The bedded fish in banks out-wrest
 Or curious traitors sleeve-silk flies
 Bewitch poor fishes wandering eyes

For thee, thou need'st no such deceit
 For thee thyself are thine own bait;
 The fish that is not caught thereby
 Alas, is wiser far than I.

I have used the following code:

A simple underlining, e.g. fish indicates that the word belongs to the semantic field of fishing.

A wavy line, e.g. enamoured, indicates that a word is used metaphorically to describe the word from the manifest sign's semantic field. Thus although "fish" is used metaphorically in this poem, that is, as a manifest sign to talk about lovers, the fish itself is described metaphorically as "enamoured."

A dotted line, e.g. sands, indicates a word which is not generally associated or not closely associated with the semantic field of the manifest but which, within the context of the discourse established by the poem, is so associated. A dotted line does not preclude the understanding that the word is being used figuratively, e.g. "sands," here, is used metonymically.

A partially straight and partially zigzagged line, e.g. bedded, indicates a moribund metaphor, particularly one which, through the discourse of the poem, may be revived. For example, "bedded" as applied to "fish" as lovers may regain some of its previous meaning.

Two types of underlining, applied to one word, e.g. silken, indicate an ambiguity or an unclarity or an indecision as to how we ought to construe the word with regard to the semantic field of the manifest sign.

Words which are marked not at all are either not used metaphorically but are literal expressions from the semantic field of the principal content or are used appropriately and literally for both manifest and principal systems, or are used figuratively but with regard to some other principal content.

same is not true of a verb such as to fish,² Donne includes terms from the *Locative* case in his poem and thus we include the *Locative* in our representation of the field of fishing terms. This representation is given in Figure 2a.

The paradigmatic relations occupying the different syntagmatic slots are varied. To fish is a general term, the superordinate term for verbs such as to angle, to net, to snare, etc. To fish is also partially synonymous with the verb to catch. The partial synonymy is relative to the semantic field of fishing--in a less specialized context, to fish is a hyponym of to catch. The hyponyms of to fish can be arranged in order of degree of violence, degree of skill, or ranked according to some other criterion. Thus in addition to the relation of hyponymy, we can introduce a ranking relation among the hyponyms into the field. In terms of the development of the poem, we will want to order the hyponyms in regard to the degree of violence or cunning involved in the method of fishing. Thus in Figure 2c we have arranged the hyponyms of to fish so as to reflect the relative degrees of cunning and violence involved in the various methods. This ranking, as we will see later, will be used to help reorder the field of courtship. In the *Agent* position we have only one hyponym of fisherman, that is angler. However, the other hyponyms of fishing are also productive of nouns which would be cohyponymous with angler, such as "netter," "snarer," etc. The *Patient* position can be filled either by the superordinate term, the noun fish, or any of its

² Of course, fishing takes place somewhere, but one can say of any activity that it takes place somewhere. The locative then does little to specify the semantic field of fishing.

A Case Representation of a Sentence from the Field of Fishing

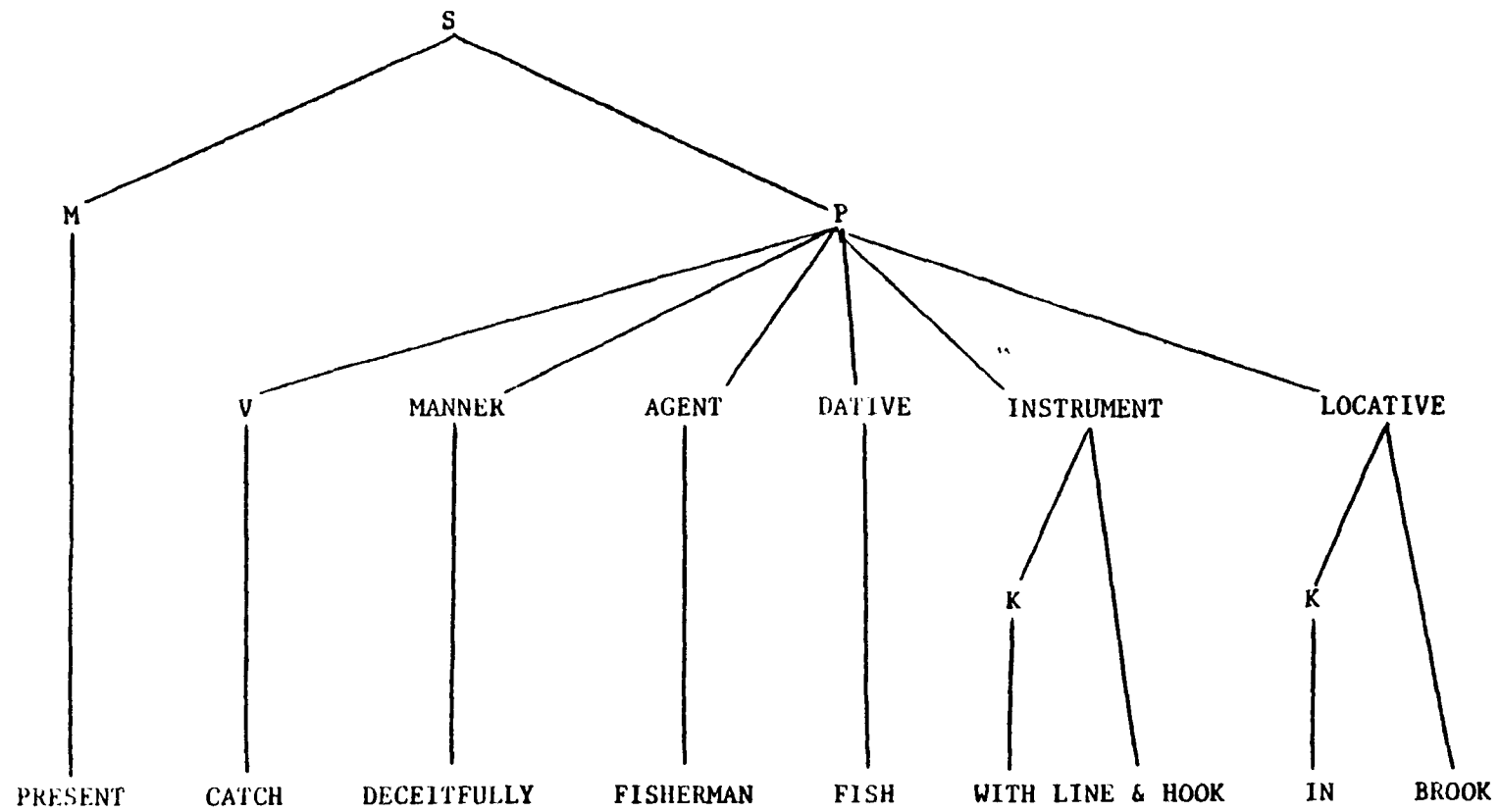


Figure 2a

VERB	MANNER	AGENT	PATIENT	INSTRUMENT	LOCATIVE
CATCH(ES) FISHES(FOR)	treacherously deceitfully cunningly traitorously	FISHER- MAN	FISH	No Superordinate term To Capture with	BROOKS BATH- archaic use CHANNEL
ANGLES				Rod w/ hook Line & hook	RIVER
FLY-FISHES		ANGLER	KINDS OF FISH	Bait, Lure, Flies	SEA, OCEAN, STREAM, ETC.
BESETS NETS				(windowy) NET	BANK (RIVER) w/ shells and weeds
TRAPS		TRAPPER		Optional: Bait	
SNARES				Optional: Bait	
OUT-WRESTS				SNARE	
				"Bold coarse HANDS "	"Slimy nests" in RIVER BEDS

Figure 2b

FISHES (FOR) ≡ TRIES TO CATCH <FISH>				
ANGLE		BESET <FISH>		OUT-WREST <FISH>
[VARIOUS TYPES OF BAIT USED]	FLY - FISHING	NET	TRAP	
			[TYPES OF TRAP USED]	SNARE

Figure 2c

≡ Synonymy relative to field

<> Selection restriction relative to field

[] Parameter used in distinguishing cohyponyms

Ranking according to increase in degree of violence is indicated
from left to right.

Ranking according to increase in deceitful nature of capture is indicated
from top -- excluding the superordinate terms -- to bottom.

hyponyms, that is any term specifying a kind of fish. Although a knowing fisherman will prefer to use one method of fishing to catch some kinds of fish and not others, this knowledge is not linguistically specified. Thus while we cannot say of an angler that he is snaring fish, but only that he fishes, is catching fish, or is angling for fish, there is nothing linguistically odd in saying that we angle for trout, snare trout, net trout, etc. (However, there may be size limitations on the kinds of fish that are caught by some of these methods. One would not angle for a large shark or whale.)

The *Instrumental* case includes instruments for two different aspects of fishing, one involving the capture of the fish, the other involving the pursuit or attraction of the fish.³ The *Instrumental* terms, as well as terms from other cases, such as "angler" in the *Agentive* case, have to be lined up in the representation of the field (Figure 2b) to collocate with the appropriate verb. One does not net fish with a line and hook, a fact which is reflected in the selection restrictions on the words net and angle.

The *Locative* case has as its paradigmatic set a number of cohyponymous terms, designating bodies of water and the land areas on which they border--one fishes in a body of water or on the land area bordering on that body of water. In Figure 2b I have arranged, in tabular form, the syntagmatic field of fishing together with the paradigmatic sets which would serve to fill the positions indicated by the syntagmatic relations. In addition, I have included a "category" I have called *Manner*, which, as it modifies

³ In the paradigmatic field of fishing reflecting the temporal sequence of fishing activities, we see these two aspects of fishing as temporally ordered. See figure 3.

Sequence of Activities

<u>BEGINNING</u>		<u>MIDDLE</u>		<u>END</u>	
BAIT ATTACH LURE FLIES ONTO HOOK	PUT HOOK and LINE into WATER	ATTRACT FISH w/BAIT etc.	CATCH FISH (Hook fish)	CAPTURE FISH (Pull fish out of water)	KILL FISH <u>or</u> THROW FISH BACK

This sequence is a serial, temporal ordering of discrete events.

Figure 3

the verb and is not composed of noun phrases, is not properly a case or a role. Yet it bears a distinct syntagmatic relation to other elements in the field and it is clear that the constraints on the collocatability of the adverbs is dependent on semantic considerations related both to the verb and to the instrument. For example, one does not catch fish bewitchingly with "coarse bold hands" but with a "sleeve-silk fiy."

The semantic field of fishing can also be arranged paradigmatically, so that it is organized as a serial, temporal ordering of discrete events. This paradigmatic set can as well be viewed as a temporally ordered set of markers specifying the meaning of the term to fish and its hyponyms. In figure 3 I have represented the field for angling, although by substituting the proper instrumental terms one can represent the field for any co-hyponym of angling. Notice that in a serially ordered set there are certain implications concerning the notions of "before" and "after" which follow analytically from the terms involved. It is analytically true that one cannot "throw back the fish into the water" unless one has first pulled the fish out of the water. Notice also that this paradigm calls largely upon the elements of the *Instrumental* and *Locative* roles in the syntagmatic field, while the *Agent* is less prominent. Nor is there any constraint placed on the identity of the *Agent* through the sequence as there is on the identity of the *Patient*. The *Agent* could be different at each stage of the progression, but if the *Instrument* and *Patient* remain the same, the sequence is that of one sustained action of fishing. This serial sequence is determinate and differentiated: one can identify determinate activities which begin and end the sequence and which differentiate each progressive step.

Although one quickly perceives that the poem "The Bait" uses the metaphor of fishing to speak of courtship, if we look closely we find that it is not until the last stanza that one of the fishing words is explicitly used metaphorically:

For thee, thou needs't no such deceit
For thou thyself are thine own bait;

The first instance in the poem of a clear conceptual incongruity centering around a fishing word, "bait," occurs on the second line above. The metaphoric phrases found up to this point are metaphoric descriptions of fish or fishing. Now we can see how a poet may utilize that ambiguity of which Sanders spoke--the ambiguity in which we are not clear which terms are the foci and which are the frame of the metaphor. When Donne says

And there the enamoured fish will stay
Begging themselves they may betray

"fish" is being used literally and "enamoured" and "begging themselves they may betray" are used figuratively to speak of fish. We do not literally speak of fish as "in love" or "enamoured." One could construct appropriate selection restrictions to indicate this. Rereading these lines in light of the poem's end (and in light of the conventions governing the love poetry mocked in "The Bait") we can take "fish" as the manifest sign for lovers, and the terms "enamoured" and "begging themselves they may betray" as literal talk about these lovers.

Although the conventions of poetry and the knowledge that this poem is a parody of a famous love poem would lead us to construe talk of "fishing" in the poem as metaphorical, the actual textual incongruity of "fishing" on which the metaphorical interpretation depends is found in the use of the word "bait," (an importance reflected in Donne's choice of

this term as the title of the poem). Indeed, the line:

For thou thyself are thine own bait

has at least two interpretations, both involving an oddity or incongruity. In one case the lady addressed is both the bait and the one using the bait to catch some fish. In the other case the lady is both the bait and the fish to be caught by means of the bait. The first involves a semantic incongruity--"bait" occupies the position of *Instrument* and therefore cannot occupy the position of *Agent* (each element of a syntagma stands in only one relation to the verb at a time). The second involves a logical incongruity so that we cannot possibly assign a referent to bait if understood literally. For bait can only be the instrument by which to attract some object other than oneself: x is bait for y and x ≠ y is part of the logical structure of "bait."⁴ In the line cited, "bait" is used in a manner which would give it an impossible meaning--that is, a meaning to which we could not possibly assign a referent if understood literally. Without such textual incongruity, one would say that fish and fishing are symbols of lovers and courtship rather than metaphors and that the poem was an allegory rather than an extended metaphor. By virtue of its metaphorical use, "bait" transforms the setting of a lover's meeting--the river banks where the lovers go fishing--into a metaphorical setting for the activity in fact occurring between them, the courtship.

⁴ In a less strict sense, it is also incongruous to speak of a person serving as "bait." One can imagine a literal description of a situation where a human body is used as a bait--i.e. by some malevolent person who is hunting sharks or other carnivorous fish with human bait. Even in this circumstance it is the human body, not the person, which serves as bait. But this situation is clearly foreclosed by the circumstances appropriate to the poem.

One can say that in the poem, two fields are made to meet at a juncture marked out by this term so that we construct our semantic field of fishing to include what is in fact an optional element in the process, and we construe the field of courtship to include something analogous (homologous) to a bait.

At this time, we would ideally map out the conceptual field of courtship as it is articulated by some lexical set of English. However, as it is virtually inconceivable that any project of descriptive semantics could map out all the semantic fields of any natural language, and as Adrienne Lehrer has said (personal communication),⁵ semantic fields "are constructed as they are needed," it is not clear how to construct such a field without the guidance of some context. In speaking of courtship, however, certain things seem fairly clear and constant, namely, the relation of love between lover and beloved, and the attempt on the part of the lover to win over the beloved. These constant elements can be rendered simply by the following schema.

Figure 4.

<i>VERB</i>	<i>AGENT</i>	<i>PATIENT</i>
courts	lover	beloved

Notice that "to court" and "to fish" are importantly disjoint in their realm of application. Although both may have human subjects, both do not have human direct objects. Both fish and beloved are animate, that is have the feature [Animate] in their semantic representation, and thus the two terms do not belong to completely disjoint classes. But [Animate]

⁵ They are not thereby ad hoc. They are governed by such sense-relations, paradigmatic and syntagmatic, of which we have spoken.

is such a general feature that we can bracket it and consider the classes to which fish belong and the classes to which beloved persons belong as disjoint.

To fish and to court may both be analyzed so as to contain the marker [To Attract]--a concept common to both. We have claimed that metaphor is a moving across semantic fields--a crossing over conceptual domains. Sometimes the movement across is facilitated by pre-established bridges in the form of recognized similarities among terms from both fields. At other times the move is a jump across, to be facilitated only later by the recognition of a common semantic feature or by a common element in a syntagmatic field--the bridge is built after the gulf has been traversed. That is to say, in some cases of metaphor there are no recognized similarities between two words and the semantic fields to which they belong, although once the metaphor is made, we rethink our understanding of the words and their fields so as to find similarities which make the mental move from one field to another less baffling, less abrupt. These similarities, found post facto, which serve to bridge two semantic fields, take the form of an explication. In the case of the metaphor with which we are concerned, there are at least two such bridges we can construct once fishing has been used as a metaphor for courting: 1) the common semantic markers for both fishing and courting, e.g. [Attract]; 2) a common element in the syntagmatic field of both fishing and courting, e.g. the *Locative* case. The presence of the locative serves, at least in part, to provide such a transverse since the aquatic setting, brooks, river banks, beaches, springs, etc. is not only appropriate to fishing, it is also a traditional setting for lovers. Thus the move from the field

of fishing to courtship is made via the direct route of significant (that is, not merely general features generated by redundancy rules) coincident semantic features in the verbs of fishing and courting and via the more circuitous route of the common aquatic *Locative*.

Besides the most general characterization of courtship, it is difficult to specify the field without some textual or contextual guidance. If we construct the field from the text of the poem, then assuming that the thesis of this work is correct--that in metaphor one semantic field organizes the conceptual domain of another semantic field--the field of courtship will structurally resemble the field of fishing. But then we will have no way of deciding whether the parallel is the cause of the metaphor or the result of the metaphor. In other words, what is most difficult to demonstrate is my claim that the semantic field of the manifest sign re-orders and re-organizes the principal content field. Fortunately, the relation of the critical element of the fishing metaphor (the bait) to the other elements of the field is not easily transferable into the field of courtship, thus creating some more readily apparent restructuring of the latter field. The difficulty of the transfer creates oddity of the line,

For thou thyself art thine own bait,

and the subsequent interest in the poem's central metaphor.

Let us compare the fields of fishing and courtship. The syntagmatic elements of fishing include, *Verb, Manner, Agent, Patient, Instrument Locative* (optional). Those of courtship include *Verb, Agent, Patient, and Locative* (optional). The *Locative* is perhaps much less important in courtship than in fishing, as courting can be done most anywhere while

fishing must be done in or by a body of water, but for reasons stated earlier, it is optional in both fields. *Instrument*, as we pointed out before, is relatively obligatory for fishing. For example, the question: "With what is he catching fish?" is a perfectly normal one. In fact, there is a certain oddity in the description of the fishing scene in the second stanza of the poem, taken as a literal rendering:

When thou wilt swim in that live bath
Each fish which every channel hath
Will amourosly to thee swim
Gladder to catch thee than thou him.

The lady addressed in the poem is presumably catching fish using no instruments whatsoever. *Instrument*, however, is highly optional, perhaps even normally inappropriate to courtship. If one says "He courts her," the question "With what?" is somewhat strange. Thus in the metaphorical line "For thou thyself art thine own bait," we introduce into the field of courtship the relation of *Instrument*. I suggested above that the verse in which "bait" appears may mean that the same referent who occupies the position of *Agent* also occupies the place of *Instrument*, that is, the woman addressed in the poem.⁶ We can indicate the syntagmatic relations and the elements which figure as the relata by means of Figure 5. Because the referents denoted by the concepts "lover" and "beloved" change in the poem, I am using subscripts to indicate who is being referred to.

Figure 5

VERB	AGENT	PATIENT	INSTRUMENT	LOCATIVE
courts	lover _W	beloved _P	lover _W	river <u>bed</u>
	W = Woman addressed in the poem			
	P = Poet			

⁶And this in spite of the fact that the role of *Instrument* is not normally filled by persons.

However, that verse is ambiguous and the situation is far more complicated, for this is, by convention, a love poem wherein the lover is the poet and the beloved is the woman addressed in the poem. This is clearly indicated in the opening lines and in the fourth stanza which is a sample of conventional love poetry. Thus the diagrammatic representation should have referential subscripts as follows

Figure 6

<i>VERB</i>	<i>AGENT</i>	<i>PATIENT</i>	<i>INSTRUMENT</i>
courts	lover _P	beloved _W	? (beloved _W)

Thus, somewhere in the poem there is a reversal of what referents are to occupy the positions mapped out by the field. In the representation of Figure 6 it cannot be the beloved who serves as bait because the fish swallows the bait and by analogy that would mean that the beloved would simply catch? attract? herself. There is no way to make sense of such a construction. We can, however, interpret *Instrument* differently in Figure 6. In the first stanza of the poem Donne writes,

And we will some new pleasures prove
Of golden sands and crystal brooks
With silken lines and silver hooks

All four adjectives in the last two lines form a set of terms describing precious and fine materials: gold, crystal, silk and silver. These are also terms often associated with weddings and courtship. Indeed, one can say that they are materials with which a lover woos his beloved. Moreover, the lover here is a poet and a poet woos with words, words such as those composing the fourth stanza (which is otherwise the only stanza unrelated to the fishing scene and metaphor). Thus we can sketch another representation of courtship, Figure 7.

Figure 7

<i>VERB</i>	<i>AGENT</i>	<i>PATIENT</i>	<i>INSTRUMENT</i>
courts	lover _P	beloved _W	precious materials silk silver gold crystal fine words poetry flattery

Figure 7 looks rather like an ordinary representation of the field of courtship even though the introduction of the relation *Instrument* was guided by the field of fishing. But as we have seen there is also a turn-about courtship in this poem where the woman is the *Agent* and the poet is the *Patient*. Where one speaks of the woman as the *Agent* in the courtship--where a woman allures and wittingly or unwittingly attracts the man--we do often speak of the means by which she attracts the man: by artifice, e.g., makeup, clothes, by natural charm, by intellect, by beauty, etc. Thus we have the following representation of a turn-about courtship:

Figure 8

<i>VERB</i>	<i>AGENT</i>	<i>PATIENT</i>	<i>INSTRUMENT</i>
courts attract	lover _W attracting person*	beloved _P (potential lover)	artifice charm intellect beauty etc.

*In the case where the verb is attract, the *Agent* need not be the lover because the attracting person may unwittingly attract some person whom she may not love--similarly then, the *Patient* may not be the beloved, although he himself has become attracted.

Once we have introduced the relation of *Instrument*, we can introduce the set of modifiers on the verb because these modifiers, in the case of

the structures with which we are concerned above, relate to *Instrument* at least as much as to the verb. For example, if the means of attraction is one of natural charm, then the manner could not be deceitful, whereas if the means of attraction involves artifice, then the manner of attracting is not innocent or guileless. Thus we further structure the courtship relation by introducing into the field a place for *Manner*.

However, the most striking way in which the metaphor of bait orders and reorders the field of courtship is seen in the following set of relations.

1. a. Fisherman (tries to) catch(es) fish by means of bait.
 b. Bait attracts fish.
2. a. Lover_P (tries to) catch(es) beloved_W by means of . . .
 b. Beloved_W attracts lover_P
3. a. Lover_W (tries to) catch(es) beloved_P by means of . . .
 b. Beloved_W attracts lover_P
 c. Lover_W attracts beloved_P

In an analogue to 1. in the field of courtship, let us say sentence 2 above, the appropriate completion of 2a would involve the insertion of beloved_W in the blank space, a space occupied by bait in sentence 1a. But that does not work. The beloved cannot be the prey and the means of catching the prey, that is herself. In an analogue formulated as 3, we can insert beloved_W into the blank space. Now we are saying that the lover, the woman, is attempting to attract the beloved, the poet, by using herself (presumably her own charms, etc.) to attract him. This is conceptually sound; however, the referential subscripts in 3a and in 3b are not consistent. In 3a they indicate that the woman is the lover and the poet the beloved, while in 3b it is the woman who is the beloved and

the poet who is the lover. One cannot change referential subscripts in midsentence without ambiguity and confusion. By substituting the formulation in 3c for the one in 3b, we get the needed consistency in our referential subscripts, and we have the desired conceptual coherence: the woman tries to attract the poet by means of herself. (Again we have the metonymy of the woman for her charms or other natural endowments by which she attracts the poet.) But on this account, the woman plays the role of the *Patient*, beloved, and we have now lost sight of the original courting situation first established by the poem in its opening lines. Various other permutations are possible, but what Donne has done is to create a metaphor which on the surface seems plausible, but which in fact is impossible to explicate in terms of the relations which are set up and transferred. If "The Bait" were a serious love poem, this might be a problem.⁷ But the problem is, in fact, the solution, for this is not a serious love poem; it is a parody and it mocks the view of courtship presented by such traditional love poetry. This is a view in which a poetic offer of the idyllic life in an idyllic setting, or rather the poem itself, is the "bait" presented by the lover-poet to his beloved, only because he is himself attracted to the bait that she is.

Another element of the parody which takes place by means of the metaphor is reflected in the paradigmatic relations of the semantic field of fishing: the movement in the poem from an idyllic fishing scene in the first three stanzas to the nasty struggle which occurs in the two

⁷ Although, of course, there are many metaphors which can only be explicated in very limited ways. Of an extended metaphor such as the one in this poem, a poem written by as intellectual a poet as Donne, we can expect that the metaphor is explicable in terms of the new relations it sets up in the principal field.

penultimate stanzas. As I mentioned earlier, the degree to which violence and deception are used on the part of the fisherman is one organizing principle in the field of fishing terms. In Figure 2c I have arranged terms which denote the activity of fishing on such a graded scale. The superordinate terms catch and fish are relatively neutral in this regard. In the second and third stanza Donne portrays a fishing scene in which the fisherwoman needs no instrument to attract the fish--in fact, the fishing scene is really structured like a love scene--i.e. here the field of courtship is the manifest sign for the principal content of fishing. After the conventional verses of love poetry in the middle of the poem, we arrive at a very straightforward, literal description of fishing: first, using the angling rod, then the snare and net, followed by the use of brute force "coarse bold hands" and finally, the ultimate villainy, cunning, beauty used in the service of betrayal ("curious traitors, sleeve-silk flies"). With the introduction of instruments by which to catch the fish, the setting moves from the idyllic to the unpleasant ("cut their legs with shells and weeds," "slimy nests"). All this suggests that in courtship too we move from the pleasant activity of flirtation through to the struggle of real sexual encounters and conflicts, to the extremes of brute force, rape, and the more subtle violence, the cunning and villainy of seduction. The metaphor can imply all this, by virtue of a transfer of a set of relations: a set of relations governing cohyponyms graded with respect to degree of violence and cunning in one field is transposed onto another field, where the reader or listener can sort out the concepts of that second field in light of the transferred relations. Through his use of the fishing metaphor in what appears to be conventional love poetry,

Donne has completely re-oriented our idyllic preconceptions of courtship, introducing into it an element of unpleasantness, conflict and struggle.

Notice that the two penultimate stanzas are completely ambiguous as to the question of what referents occupy what roles in the activity of fishing. Is the poet speaking of other male lovers--not himself--pursuing their sexual prey? That would appear likely given all conventions of male-female relations and the setting of the conventional love poem as it is reinstated by the middle stanza. But the last stanza forces us to reread the two previous ones as speaking of other women (who) are attempting to attract the men (fish) they desire. Again, the reversals of conventional lines of analogy are part of the irony and parody in the poem.

In the above discussion of "The Bait," the goal has not been to give an analysis of the poem, but to offer an example of how the principal content of the metaphor, the extended metaphor, is reoriented in terms of the perspective offered by the manifest sign of the metaphor. This perspectival reordering takes place not only by means of drawing similarities as given in common semantic features, but by setting up relations in the principal's field which mimic those in the field of the manifest sign. In the Donne poem, we have the interesting additional feature of parody, which involves the reversals of relations and the absurdities into which we are led by means of the metaphoric relations established by the poem--absurdities and reversals which reflect back to the matter which forms the subject of the poem, i.e. courtship and even more pertinently, courtly poetry--as it is this poetry which is the instrument (the bait) of the poet who woos his lady. In looking at this poem we also see most clearly how a metaphor develops in the expression level of

of the principal sign--that is by exploiting relations among the elements of the semantic field of the manifest sign. The reader follows along and simultaneously draws the homologous relations between the two fields so that in the end, one can even draw a neat diagram reflecting the parallels. But such a diagram would not do justice to the stretching and pulling we must do to our usual conception of the principal content to fit it neatly into the positions established by the field of the manifest sign. If the match is too easy, the metaphor is banal--more a simple analogy than a metaphor--and its effect is decorative rather than cognitive: since the use of the manifest sign does little to restructure the principal content field, the use of a connotative structure is relatively gratuitous.

Sometimes the match is made easy by structuring the field of the manifest sign in accordance with the relations governing the field of the content plane, rather than having the field of the manifest sign order the field of the principal content. When we look more carefully at the Shelley poem in which bees serve as a metaphor for workers, we find that the worker bee is opposed only to the drone and not to both queen and drone.

Wherefore, Bees of England, forge
Many a weapon, chain, and scourge
That these stingless drones may spoil
The forced produce of you toil?
(from "Song to the Men of England")

The opposition Shelley chooses reflects the opposition between capitalist and worker, which Shelley must then have had in mind. Otherwise, it is reasonable to suppose, he would have made use of the trichotomous hierarchy presented by the social structure of bees to

speak of the society of men.⁸ Moreover, in Shelley's poem bees are spoken of as if they were exploited by the drones. The notion of exploitation is one which is borrowed from the principal content, workers. Bees are pictured as producing weapons for the drones and although bees do possess the weapon of the sting, to consider them to be forging weapons for the stingless drones is again a notion dictated by the content plane of the metaphor, not by the expression plane. It should not be surprising then that the metaphor lacks interest; the manifest sign is only added on to the content, it does not structure the content since it is the content which structures the expression plane, the field of the manifest sign. Although all metaphors have connotative structures, not all metaphors have much cognitive interest. The degree to which a metaphor is enlightening depends rather on how much play on the level of expression is going to be productive of new meaning and new insights on the plane of content.

"Once did She hold the gorgeous East in fee"

The metaphor of the bait and its extension in terms of fishing were best characterized by a transference of syntagmatic relations. I would now like to illustrate a metaphoric process in which paradigmatic relations play a primary role. Here I will use Wordsworth's poem "On the Extinction of the Venetian Republic," in which the poet speaks of

⁸ That Shelley's contrast between worker and lord is an economic one rather than a socio-economic one is I believe reflected in the fact that the Queen does not figure in the poem in spite of the obvious way in which the metaphor of bee could have been exploited in this direction. His views, although pre-dating Marx, seem to be struggling with an opposition characteristic of Marxist socialism.

the rise and fall of Venice in terms of the life of a noblewoman. The poem is given in full below.

On the Extinction of the Venetian Republic

William Wordsworth

Once did She hold the gorgeous East in fee,
 And was the safeguard of the West; the worth
 Of Venice did not fall below her birth,
 Venice, the eldest child of liberty.
 She was a maiden city, bright and free;
 No guile seduce, no force could violate;
 And when she took unto herself a mate,
 She must espouse the everlasting Sea.
 And what if she had seen those glories fade,
 Those titles vanish, and that strength decay,--
 Yet shall some tribute of regret be paid
 When her long life hath reach'd its final day;
 Men are we, and must grieve when even the shade
 Of that which once was great is pass'd away.

In order to characterize what occurs in this metaphor we must introduce a distinction among two types of serial ordering. John Lyons recognizes serial ordering as one type of paradigmatic sense-relation. An analysis of this poem's extended metaphor makes us realize, however, that there are at least two different types of serial ordering, both of which are non-cyclical.

A semantic field of a history consists of a set of narrative events, or a narrative description of events, arranged as a chronological ordering. A chronology is an arrangement of data in the order of time occurrence, where time is computed by regular divisions, and in which events or transactions are assigned their proper dates. Thus, a simplified short history of Venice exemplifying a chronology reads like this:

Venice was founded in A.D. 811 by inhabitants of Malemocco, near the Lido, fleeing from the Franks. In 823, the bones of St. Mark the Evangelist were brought from Alexandria . . . The Republic was

developed under the rule of a doge . . . From the ninth to the thirteenth century Venice grew steadily richer . . . The Crusaders, led by Doge Dandolo, captured Constantinople in 1204 . . . The fifteenth century saw Venetian power at its zenith: the Turks were defeated at Gallipoli in 1416, etc.⁹

In contrast to a chronological relation among elements of a field, there is an ordering according to the stages or divisions of a process. While a chronology cannot be cyclical, an ordering according to stages may or may not be cyclical. Biological processes in nature are often spoken of in terms of cyclical, stage-like orderings, though a temporal description of any particular biological organism could also be rendered in terms of a chronology. For want of better terms then, we will say that among serial orderings we can distinguish between a chronology and a series of stages.

The life of a noblewoman, as the history of any individual, can be rendered as a chronology or as a series of stages. When we choose to represent the history of some composite entity, such as a generalized noblewoman, rather than an individual being, a particular noblewoman, we give an account by stages.¹⁰ Here we have a clear case of metaphor as the subsumption of an individual, the state of Venice, under an incongruous category, that of a noblewoman. And in this subsumption, the structure of the latter is imposed on the former.

We might give the stages of the life of a noblewoman as follows:

⁹ *Italy Michelin Green Guide*, Great Britain, 1976, p. 235.

¹⁰ A chronology, in which actual dates are specified, can only be applied to the case of an individual. It is the events in the individual's life that are marked along the regular time intervals of a chronology--thus there can be no chronology of a generalized entity, only of a specific entity.

Figure 9a

Birth / Childhood / Maidenhood / Marriage / (Childbearing) / Old Age / Death

Each stage which is a paradigmatic element in the semantic field of the life history of a noblewoman may be represented as itself involving other terms and relations, both paradigmatic or syntagmatic. A birth may be "high" or "low" and involves a set of syntagmatic relations between the one born and the parents. These additional relations are given in Figure 9b.

A chronological ordering, such as that normally used for an individual's history, appears to have a certain objectivity or neutrality, for the regular division of time intervals presupposes nothing about the events to be marked for the recording of the history. A stage-like ordering is an overt interpretive device. The history is to conform to a certain model and the events which conform to that model are to be appropriated to their positions in that model.¹¹ While the historian assumes a stance of objectivity, the poet can openly acknowledge a guiding model for his perception of the historical events by use of explicit metaphor. The poet allows the reader to judge his interpretation on the strength of his metaphor. The events of which Wordsworth speaks must be inferred; one does not learn the history of Venice from the poem. What the poem provides is an interpretive or reinterpreative frame for the historical events so that when Wordsworth speaks of Venice as having not fallen "below her birth" we engage the antonyms of "high birth," "low

¹¹ Of course the chronology might also be said to have an implicit interpretive function, that is the denial of any formative structure in history. But having remarked on the possible presence of a priori assumptions in the case of both types of ordering, we leave the controversy to the philosophers of history.

Life Cycle of Woman of Nobility

Birth	Childhood	Maidenhood	Marriage	Childbearing	Old Age	Death	After Death (Mourning)
high or low	youngest oldest middle	bright free (not) seduced (not) violated	spouse	(Optional, not men- tioned in the poem.)	glories fade strength decays titles vanish	final decay died passed away	neglect or tribute or regret paid grieve (mourns y grieves death neglects of x
x is born of y & z	x is child of y & z	x is not {seduced violated}	x {marries spouses} y (took unto herself a mate)				
Verb Result Source/ Cause(s)	Verb Patient Source	Verb Patient Agent	Verb Agent Patient		Verb Patient Source/ Cause		Verb Agent Cause
x y & z	x y & z	x (implied)	x y		fade old woman's old decay glories, old vanish straight, age title		y death of

Figure 2b

birth" as an interpretive device for regarding the establishment of Venice and the syntagmatic relation of being born of some parent(s). (Venetians claim their origin from the Romans who fled the mainland during the barbarian invasions.) Similarly maidenhood is a stage defined negatively in terms of the domination of a woman by some male agent. A maiden is

{ not married
not violated by some agent. The metaphoric identification of early
not seduced

Venice and the maiden is presupposed. The agent then is some power, perhaps the Ottoman empire which attempted to conquer the never-before-conquered Venice.

The marriage of Venice to the sea is a standard metaphor, one which even was materialized in the form of a ritual. Pope Alexander III gave the Doge a ring symbolizing this "rule of the sea," in gratitude for the Venetians' support of the Pope against Emperor Frederick Barbarossa. Every year thereafter, from 1173 to 1797 on Ascension Day, the Doge, dressed in gold cloth, sailed out in the gilded state galley to throw a ring into the sea with the words: "We wed thee Sea, in token of our perpetual rule." Here we see, incidentally, how the connotative structure of a metaphor is also evident in a ritual materialization of that metaphor. The principal level of expression involves material objects and gestures which are themselves semiotic--for instance, they denote the marriage ceremony. But each sign in the ritual is used, given its previous denotation, to represent a second content level, the relation of dominance asserted by Venice over the sea and over other nations by means of its access to the sea.

However, the metaphor as used by Wordsworth is a reversal of the

one in the ritual. The ritual presumes that Venice is symbolized by the male Doge who weds and hence rules the sea.¹² The poem presumes that the female Venice wed the sea, and the power she wielded, holding "the gorgeous East in fee" and being "the safeguard of the West," came from the appropriate union. Like other noblewomen, her power is at its zenith when her high birth is coupled with a sufficiently potent mate. (I will allow the metaphor of potency, sexual and political, to do service in this context.)

The Wordsworth poem, like the Donne poem, is a playing out of the relations on the level of expression. Marriage is followed by old age and death. And just as we saw in the analysis of the Donne metaphor, the manifest sign brought into the principal content field a somewhat incongruous, but not totally incompatible element (or relation), i.e. the instrument. In the case of Wordsworth's metaphor we similarly have the introduction of a novel element into the principal field of content. At the death of someone great we pay tribute. While death is the final stage of life it is not the last element in the field Wordsworth has set up for us. The element I have labeled "after death" has two antonymous possibilities: "neglect" and "to pay tribute of regret" (which is a near synonymy of "grieve" or "mourn"). The parallel between Venice and a woman of nobility, once established, must be played out and the last element of the historical sequence, the demise of the Venetian Republic which culminated with Napoleon's conquest of an already dying Republic in 1797, becomes the penultimate one of the reordered sequence. Here,

¹² Voltaire said of this marriage that it was not valid because it lacked the consent of the bride.

the descriptive metaphor becomes the prescriptive model: after death there is grieving for what was once great--so with the fall of the Venetian Republic we too must grieve.

Curiously, Wordsworth neglects a standard stage in a woman's life history, viz. childbearing. For whatever reason he chose to exclude it, it is an element which could easily be inserted. Then we could predict the formation of other metaphors which draw on the relation of a woman to offspring. We could speak of the artistic and cultural achievements of Venice as her children, "the products of her labour." Alternatively one could speak of the imperial expansion of Venice as the city "giving birth to an Empire."

In Figure 10, I have given the restructured field of Venetian history. But this representation must be viewed as the result of a process of reordering, not as the basis of a pre-given similarity between the life stages of a noblewoman and the history of the Venetian Republic.

The Midwife

A final example of how metaphors transfer relations which reorder fields is taken not from poetry but from philosophy, from the work of Plato. Plato must have been so antagonistic to poetry not because he despised it but because he knew its potency. In the *Theaetetus* we find one of the great metaphors in the Socratic-Platonic literature. Socrates there speaks of himself as a midwife. The metaphor plays on the relation between creation and procreation and the fields to which these notions belong. The semantic field of midwifery has a syntagmatic representation which is somewhat more complicated than our previous fields for it has an

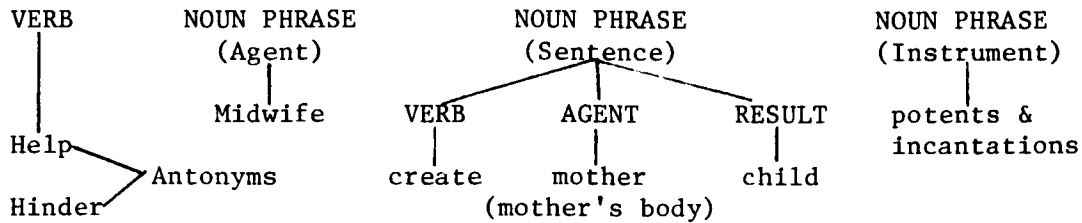
REORDERED FIELD OF VENETIAN HISTORY

BIRTH	CHILDHOOD	MAIDENHOOD	MARRIAGE	OLD AGE	DEATH	AFTER DEATH
Venice is born of Romans and liberty. Romans high social standing. Venice is created by the Romans who fled barbarian invasions, i.e. Romans seeking freedom from invaders.	Created by those seeking freedom, Venice was in turn one of the earliest republics which vigilantly guarded against despotism.	Venice remained invaded by no one.	Venice, by virtue of her position on the sea and her seafaring power, was able to control trade and build an Empire.	Venice suffers deterioration of political and economic stability at home and influence abroad.	Napoleon conquers the Republic.	We must pay tribute to a great fallen Republic.

Figure 10

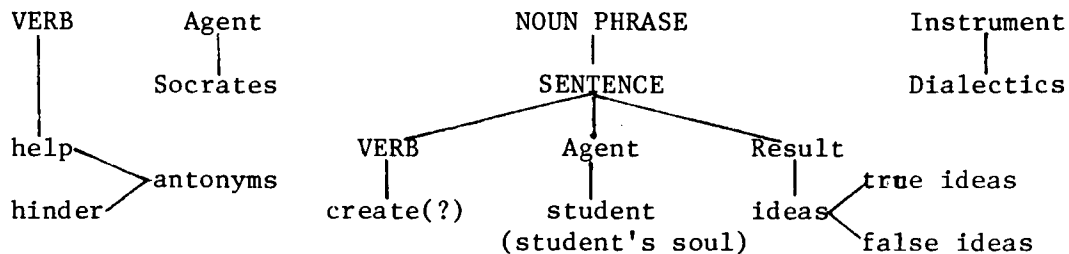
embedded sentential structure. See Figure 11.

Figure 11



When this field is used metaphorically to speak of a different domain, we can predict that that domain will be structured similarly after the metaphor has been formed, if not prior to it. In the case of the midwife metaphor in the *Theaetetus*, the principal content is the relation of Socrates to his students in general and Theaetetus in particular. That relation may be expressed as follows, using Figure 11 as a model.

Figure 12



In Figure 12 we have one paradigmatic relation not found in Figure 11, that is the opposition within the result case. In Figure 12 we find the opposition between a true idea and a false one while there is no analogical opposition between a true (or real) child and a false child. In elaborating the metaphor, Socrates remarks on the point at which the metaphor of the midwife fails.

But her performance falls short of mine. It is not the way of woman sometimes to bring forth real children, sometimes mere phantoms such that it is hard to tell the one from the other. If it were so, the highest and noblest task of the midwife would be to discern the real from the unreal, would it not? (150B)

This disanalogy differs from others which can be remarked on, such as the fact that Socrates acts upon men while the midwife acts upon women, that Socrates tends to souls while the midwife tends to bodies, that Socrates aids in the generation of ideas while the midwife aids in the generation of infants.¹³

These are all substantive differences--differences in domains, not in the ordering within domains. The negative analogy to which Socrates so carefully draws our attention is a relational disanalogy since the *Result* in the midwife field has only one entry--any other

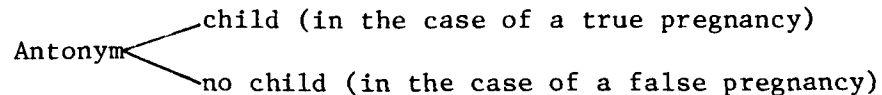
¹³ Notice that the fields generated by these syntagma result in the identification of female creation as corporal and male creation as mental or spiritual--an identification which makes woman an excellent metaphor for creativity of an intellectual sort, but excludes her as a participant of that intellectual creativity. The transference in this metaphor is a transference from the field of the physical tangible reality of corporal birth as accomplished by women to the field of mental activity, and by a simultaneous transference of the antonymous relation of male and female, to the male sphere of intellectual activity. Since one thing is always a metaphor for something other than itself, a woman's procreativity would only be a metaphor for a man's creativity--unfortunately, woman has served, in our intellectual history, as a symbol of or as a metaphor for, but not as a participant in the life of the mental and the spiritual. Once she becomes a full participant, will she still serve as a metaphor?

I would speculate that as woman becomes participant, if, as is unlikely, she progresses toward that end without regressions, she will slowly cease serving as a metaphor. Though once her full participation is secure, then woman as metaphor may again be acceptable in our language, for woman's intellectual creativity, which she shares with men, will be recognized as distinct from her unique procreative role in nurturing the embryonic human. When these two roles are no longer in danger of being conflated and her role as the former creator is not in danger of being abrogated, then the one role--the procreative one--can again serve as a metaphor for the other role--the intellectually creative one.

This is in accordance with my speculation regarding the lack of metaphor in children's language. In a period of transition, when old roles and assumptions are questioned and new ones are still unformulated, but in which the direction of the new order is set forth, metaphor is often too threatening to the establishment of the new order. This is because either it incorporates regressive assumptions (as in the case of woman as metaphor only) or because it is too radical in already using assumptions of the new order as a basis for building new incongruities.

entry, e.g. baby, infant, etc. would be synonymous with child relative to this field. However, the *Result* in the field of student-philosopher has an antonymous pair.¹⁴ Plato might have availed himself of the notion of a false or hysterical pregnancy to provide a parallel to the birth of a false idea. Perhaps the Greeks were not aware of the phenomenon. In any case, for a modern philosopher-teacher the metaphor is available so that the *Result* of the midwife field might be construed as

Result



At least one important task of the midwife would be to diagnose and distinguish a true pregnancy from a false one. Plato may have preferred to underline the disanalogy as a way of singling out the role of philosopher in distinguishing the true from the false--showing the uniqueness of the philosopher's skills. But the antonymy I have suggested may be a useful productive device for deriving new metaphors for different intentions.

Included in the field of midwifery is a paradigmatic set of temporally ordered relations. This serial ordering is progressive (non-cyclical) and stage-like. The activity of a midwife, as Socrates conceives it, begins with matchmaking and continues to the postpartum period. In the temporal sequence, each element can be framed within a set of syntagmatic relations, which can be represented as a verb with three noun phrases: midwife,

¹⁴ One could return to the field of midwifery and attempt to reconstruct it so that the *Result* would be supplied with some antonymous pair. For example, rather than placing under *Result* the term child, we might choose to put the terms good child:bad child. In such a case we are using the principal content to order the manifest sign's content, and while this is frequently done, it is, as I have indicated earlier, a sign of a weak metaphor.

mother, child. These three¹⁵ noun phrases occupy various role relations in the different stages.

The temporal field contains as its elements terms which are, in a sense, amplifications of the terms "to help" and "to hinder" and "to create" as they figure in discourse regarding procreation and midwifery. This field is given in Figure 13.

Figure 13

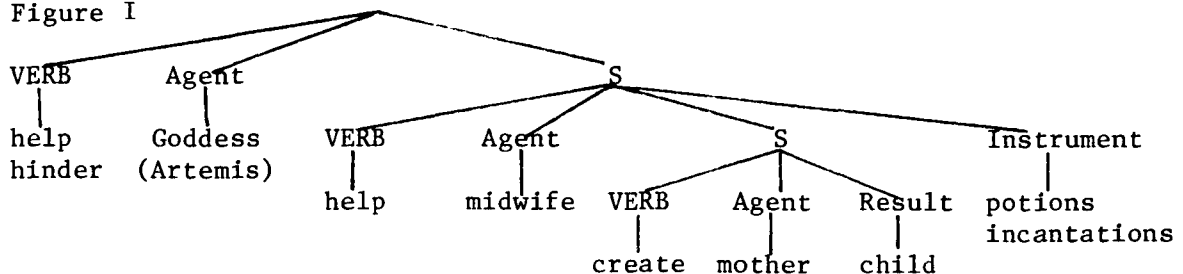
<u>Matchmaking</u>	<u>Conception</u>	<u>Pregnancy</u>	<u>Labor</u>
x matches y to w x initiates conception & pregnancy	z is conceived by y and w	y is pregnant with z	x uses potions & incantations to help y give birth to z y is in labor with z
<u>Delivery</u>	<u>Postpartum</u>	<u>Childrearing</u>	
x cuts umbilical cord x helps y to deliver z x aborts z	x takes care of y y recuperates (y suffers post-partum depression) y nurtures z y exposes z		

where x = midwife; y = mother or mother-to-be; z = child; w = father or father-to-be. (The father plays only a peripheral role in this field; it is essentially a field of female actors.)

¹⁵

One could also include the Goddess of childbirth, Artemis, whom Socrates speaks of in the *Theaetetus* and who has an analogue in the field of speculative thinking, namely Athena, thus complicating the syntagmatic field pictured in Figure 11. This more complicated field is pictured in Figure I.

Figure I

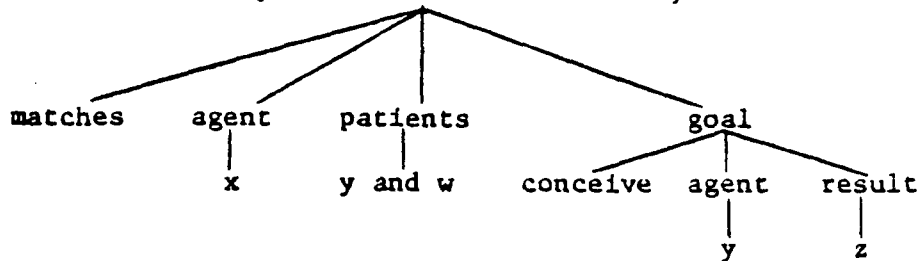


Through the metaphor, Socrates presents to us a view of learning which we can structure using the heuristic model of human procreation. One might think of learning as an accumulation of knowledge. In that case the temporal sequence is not stage-like but is ordered along a chronological continuum. Someone who is in the process of learning and has at time t , x amount of knowledge will at time $t+1$ have $x+1$ amount of knowledge. On this model, learning does not involve radical changes of state, ruptures, as it does on the model of procreation. In the metaphor Socrates has chosen, the student goes through a series of stages, just as the mother goes through a series of stages. And while the stages of childbirth are progressive--with each step, the mother-to-be gets closer to her goal--many stages involve radical changes in physiology and in the progression of the child's birth. It is not a uniformly accumulative process to be measured only along regular time intervals.

The stages are defined by the mother's relation either to the midwife or to the baby or to both. Similarly the stages of the student's progress are defined by his relation either to Socrates or to the ideas or to both. By means of Figure 13 we see that if the appropriate verbs were supplied, we could replace the variable x with the term Socrates, y with student and z with idea and the field would be the reordered field of teaching as conceived by Socrates. In this sense the transfer from the field of midwifery to that of the student-philosopher is clearly a relational transfer. I said that this transfer was easily perceivable, "if the appropriate verbs were supplied." To make my meaning clearer, I have given a schematic representation of the syntagmatic subfields of the temporal field of conception and childbirth. (See Figure 14.) Let us

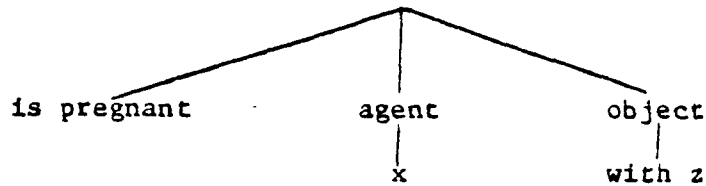
1. Matchmaking and 2. Conception

x matches y to w in order to cause y to conceive z



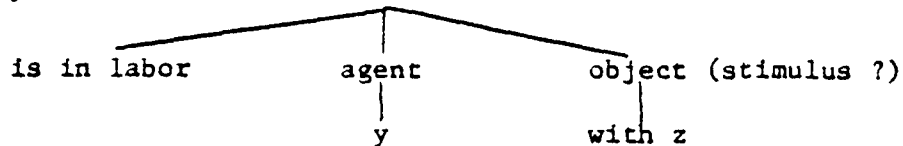
2. Pregnancy

y is pregnant with z



3. a. Labor

y is in labor with z



3. b. and 4. Labor and Delivery

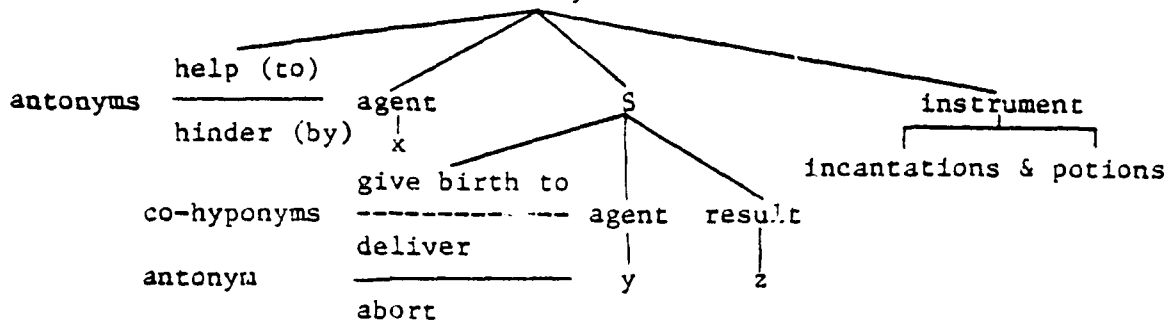


Figure 14.

Figure 14a

1. xMya to CAUSE yCz where $x \neq y \neq a \neq z$ and where M and C are nonreflexive, intransitive and asymmetric.
2. yPz where $y \neq z$ and P is nonreflexive, intransitive and asymmetric.
- 3a. yLz where $y \neq z$ and L is nonreflexive, intransitive and asymmetric.
- 3b. and 4.

xHy to CAUSE yBz by MEANS of Ix

where $x \neq y \neq z$ and H is intransitive and asymmetric
and B is nonreflexive, intransitive and asymmetric.

Field of Childbirth

xMya = x matches y to a

yCz = y conceives z

yPz = y is pregnant with z

yLz = y is in labor with z

xHy = x helps y
(helps is not generally intransitive, but in this context it is.)

yBz = y gives birth to z

Ix = x uses potions

and

x = midwife

y = mother

z = child

a = father

Field of Learning

xMya = x introduces y to a

yCz = y formulates the idea z

yPz = y thinks about z

yLz = y tests the truth of z

xHy = x helps y
(we will consider help intransitive in this context as well.)

yBz = y knows the truth or falsity of z

Ix = x uses dialectics

and

x = Socrates (or teacher)

y = student

z = idea

a = suitable intellectual partner.

take stages 3b and 4 and consider how it might be transformed to represent a syntagma concerning the relation between a teacher, his/her student and the result of the educative process. For the variables x, y, z we supply the interpretation $x = \text{teacher}$, $y = \text{student}$, and $z = \text{idea (or result of learning)}$. The main verb, or in this case the antonymous pair of verbs, can be appropriately used in the new domain as well as in the domain of childbirth. The embedded verb, or antonymous pair give birth to/abort cannot literally be used in the new domain. One could represent these terms with selection restrictions which would indicate the anomalous use. Deliver, although it is a term which has several senses which fall into various domains, is not appropriately used with regard to the relation between students and ideas. We do not say that the students deliver ideas in the sense that they may deliver newspapers or in the sense that mothers deliver babies.¹⁶ Perhaps deliver has a selection on its object, a marker such as <Physical Object>. We might substitute for the verbs "give birth to" and "deliver" terms such as "produce" or "create" and replace "abort" with "fail to produce" or "fail to create." Lastly, we substitute dialectics for incantations and potions. Then we read the new syntagma as follows: Teacher helps/henders student; student produces/fails to produce ideas by means of dialectics.

In Figure 14a, I have given another interpretation of some of the predicates, also very approximate interpretations guided mainly by the particular conception of learning put forth by Socrates. In Figure 14a I also formalize the various stages given in Figure 14, using some

¹⁶ Properly speaking we say that a woman is delivered of a baby, rather than that she delivers a baby. The passive use makes it clearer still that deliver is not properly used to describe the relation between a student and his ideas.

notation from predicate calculus, but using as connectives, the phrases "to CAUSE" and "by MEANS of." After the formal translation of 1-4, I give two sets of interpretations for the individual and predicate variables: one set using terms from the field of childbirth, and the second using terms from the field of learning. The purpose of this exercise is to indicate that what is preserved in the cross from the former field to the latter are a set of relations governing the relation between individual variables and the predicate variables. These are the syntagmatic relations of which I have spoken. The temporal relations are also preserved in the new field, as the reader can determine by appropriate substitutions of values assigned to the variables. The purpose of 14a is not to demonstrate the parallels between childbirth and learning, but to demonstrate that the "cross over" from one field to the other is accomplished by a "lifting" of the relations established in the first field, that of the manifest sign, and their adoption (adaptation) by the field of the principal sign.

Here there may be a point in speaking of certain similarities between childbirth and the creation of ideas. The concept or feature of creativity is the focus of that similarity: it serves to bridge the two domains. Because the concept of creativity is common to both--indeed is central to both--there is no need to 'leap' from one domain to the other. Thus it will not be difficult to supply a verb which, given appropriate interpretations of variables, will transform one domain into another. Such transitions however are not as easily attained at various other stages of the field represented in Figures 13 and 14. For example, in the second stage pictured in Figure 14, it is difficult to imagine what verb we might

find as an appropriate substitute for "is pregnant." There is no verb which corresponds to the concept of being in the midst of forming a new idea. Interestingly, although the metaphor "pregnant with ideas," is not a new one, it is still an effective one. Indeed the usual way of regarding the formation of ideas on the part of a student is based on a field which has a very different structure than the one which we have portrayed for childbirth. That relation may be seen in Figure 15.

Figure 15

VERB	Agent	Patient	Instrument	Result
teach	teacher	student	books (dialectics) teacher's knowledge	knowledge ideas

This relation is graphically distinct from the relation between midwife and mother. The relation pictured in Figure 15 is presumably as appropriate now as it was in Plato's day--it was then and is still now the usual way in which we conceive of the interaction between student and teacher. The midwife metaphor presents a substantial alternative and we can assume that Socrates' listeners found the metaphor itself striking. Today the midwife metaphor continues to present an important alternative view to the traditional understanding of teaching. Perhaps this is why, although it is no longer a "new" metaphor, it retains much of the vigor and illumination of a novel one. One can guess that if our understanding of the act of teaching ever approaches the one envisioned by Socrates, the metaphor will begin to lose that vitality. It will have no field to re-structure because the principal domain of teaching will, in this regard, importantly resemble the field of the manifest sign, the field of midwifery. In other words, a metaphor remains a live (and lively)

metaphor as long as the domains of the two fields employed in the metaphor are structured differently in some significant manner (or in some manner than can be made to seem significant, as in the Donne poem). The liveliness of the metaphor is more likely a function of the degree of the sustained difference between two fields (a difference which is exploited in the process of reordering one field by means of another) than a function of the time of its initial utterance.

Plato's metaphor is also effective because it is so rich, and it is so rich because the relations with which it deals are complex and varied. Moreover, it employs a paradigm of a set of developmental stages which can be extended into contiguous fields such as childrearing (moving forward in time) and mating (moving back in time). And new knowledge about the activity of childbirth provides for new productive extensions of the metaphor. If one feels inexplicably sad at the completion of some intellectual product, we may speak of one's state as being a "post-partum depression," thus offering the metaphor as a hypothesis to explain one's state of mind. (I.e. just as a woman feels depressed at the termination of a pregnancy, when the child was still a part of her, so a student, writer, etc. may feel a sense of loss at the completion of a work which is now separate from him/her.) Socrates himself extends the metaphor beyond the limits of midwifery. He complains of young men with whom he had spoken but who had left him before the appropriate time (the post-partum recovery period?) and then lost their offspring through poor parenting. The ability of a metaphor to be utilized for the expression of new but related ideas we call the productivity of the metaphor. The productivity of a metaphor is what gives it the character of a playing

out, a spinning out of matter that is the act of creativity we associate with good metaphors. In this regard the midwife metaphor is the exemplar of a good metaphor.

II. Metaphorical Vs. Non-Metaphorical Transfers of Meaning

In the foregoing examples, I have tried to show how metaphor involves a transfer of relations across the semantic fields. But must metaphor always involve at least two semantic fields?¹⁷ Firstly, the

¹⁷ Metaphors may involve more than two semantic fields. The connotative structure of metaphor may be further complicated as the following diagram illustrates.

Expression	expression	expression
	content	content
Content		

The possibilities for further complicating the structure are limited only by human tolerance for grasping such intricacies. Shakespeare provides us with some excellent examples of the triplex illustrated above. Let us recall the metaphor "bare, ruined choirs, where late the sweet birds sang." The metaphorical use of choirs to speak of autumnal boughs is, in fact, the expression plane for another principal content. The sonnet, as we learn from the opening lines and the remainder of the poem, is a love poem in which autumn (and by metonymy, the autumnal boughs) is itself a metaphor for the state of the speaker in the poem. This is roughly diagrammed below.

Bare ruined choirs	bare ruined choirs	bare ruined choirs
	autumnal boughs	empty church choirs
State of the poet		

Another way in which metaphors may involve more than two semantic fields is found in so-called mixed metaphors. A second Shakespearean example provides us with a dazzling complexity. Consider these lines from Shakespeare's Sonnet 33:

"field" of the principal content may be one that has not yet received the articulation of a lexical set. A metaphoric transfer in this case cannot be made from one semantic field onto another because we do not have two semantic fields, but only one semantic field and one unarticulated conceptual field. Secondly, there appear to be transfers of relations which do not involve two distinct fields. Goodman writes, "Among metaphors some involve transfer of a schema between disjoint realms . . . But not for all metaphors are the realms disjoint; sometimes one realm intersects or is an expansion or a contraction of the other" (*Languages of Art*, p. 81). I shall argue that Goodman is not correct in maintaining that the latter are cases of metaphor, although they do involve transfers of meaning of some sort. Non-metaphorical, albeit figurative use of language may effect a rearrangement of the relation within a semantic field, as in metonymies and irony. Thirdly, it appears difficult to determine criteria for distinguishing the 'boundaries' for a given semantic field. Thus it seems that it may not always be clear if we have one or two semantic fields. I will claim that although the theoretical determination of when we have

¹⁷(cont.) - Full many a glorious morning have I seen
 Flatter the mountain tops with sovereign eye,
 Kissing with golden face the meadows green
 Gilding pale streams with heavenly alchemy.

Let us look at the metaphor "gilding streams." (Pale, which is not clearly metaphorical, is most likely suggested by the verb to gild, not by what it modifies, viz. streams.) Clearly one can only gild a stream metaphorically. But in the poem it is the morning which is gilding the stream. But morning can only be the metaphoric subject of gild. Thus the stream is acted upon by a metaphorical action, through the agency of some agent who can only metaphorically perform that action--an action which is further modified by the prepositional phrase "with heavenly alchemy," which again can only be a metaphoric modification. Four metaphoric attributions are involved here, the manifest sign of each coming from a different semantic field. Such complexity can only be handled graciously by a person of extraordinary skill--no wonder the rest of us must guard against "mixed metaphors."

one semantic field and when we have more than one may be problematic, for any particular case we can determine the matter by careful attention to the actual linguistic situation.

In the section that follows I will attempt to answer these three difficulties with the claim that metaphor always involves two conceptual fields and generally involves two complete semantic fields. In addition, I will maintain that the proposition that metaphor involves two conceptual fields can serve as a criterion by which to judge whether or not a term is being used metaphorically. This will, in fact, serve as a means by which to distinguish live metaphors, be they novel or standard, from dead ones.

I will begin with the last difficulty first. The claim that metaphor involves two semantic fields theoretically puts certain restraints on what terms could be used metaphorically for other concepts or terms. For example, we would not use "fork" metaphorically for knife, "chair" metaphorically for table, "pen" for pencil or "swing" for slide. Each of the above pairs are pairs of co-hyponyms within their respective fields. Nor, to use an example of a part-whole relation, do we use "branch" as a metaphor for tree, although we could use "branch" as a metonymic figure for tree, that is, as a synecdoche.

There is, however, an important qualification to this constraint. Semantic fields overlap, intersect, and are embedded in one another--they are rarely completely disjoint. Thus, although we can say that two terms in the same semantic field may not be used metaphorically for one another, rarely do we find two words which exist only in one semantic field or which always appear together in a semantic field. Thus, if x and y are

two terms in semantic field A, then x will not serve as a manifest sign in a metaphor for the content of y (and vice versa) if in whatever semantic field we find x, we also find y.

However, if x and y are two terms in semantic field A and x but not y belongs to semantic field B and y but not x also belongs to field C, then using the subscript of the field to which the term belongs to indicate in what sense a particular term is being used, we can say that x_B may be the manifest sign for the content of y_C and similarly y_C may be the manifest sign for the content of x_B . In the metaphorical and ironical sentence "The blindman is a seer," we have, as we will see below, this sort of metaphor and subsequent shift in relations in the shared field.

The pairs of terms I have lined up earlier as examples of terms which would not be used as metaphors for one another serve as an open invitation to the imaginative reader to construct metaphors using one of the pair as a metaphor for the other. But if success seems at hand, I suggest that the reader carefully consider whether the terms are used in senses such that they both cover a single conceptual domain.

The constraint that metaphor cannot be made using elements in one semantic field is diametrically opposed to many traditional constraints on what will constitute metaphor. The latter require that metaphors be made among things (terms or concepts) which are not completely dissimilar--that some previous similarity must underlie a metaphor. My arguments result in the requirement that if x is to be used as a metaphor for y, it cannot be too similar. A significant disjointness in conceptual content must distinguish x and y. I use the term disjoint in a calculated manner, to bring to mind the previous discussion on notational systems.

In that discussion we concluded that if conjointness be proscribed in a system, we cannot make metaphor in that system (because we cannot form a connotative structure in that system). Now, however, we have said that for x to serve as a metaphor for y, x and y must be in fields which are disjoint in some significant way. Although these statements pull us in opposite directions, they are not antithetical. What I have claimed and have tried to show is that in their denotative systems x and y must be considered disjoint relative to some conceptual domain, so that if x belongs to semantic field A, whose conceptual domain is A, then y must be disjoint from x in that y has no place in semantic field A, i.e. y has no application in conceptual field A. However, in making a metaphor, x becomes the manifest sign for y (the content of y), which constitutes the principal content. Disjointness is then violated: x and y on their respective content planes are seen to be conjoint after all. This is the presumed similarity underlying metaphor. Thus although x and y need some important disjointness, the language system of which they are a part must permit conjointness for the metaphor to be made.

I have spoken of a significant disjointness between the domains or fields of the two "parts" of the metaphor, the manifest sign and the principal content. I speak of a significant disjointness and not a total disjointness because it is conceivable that the semantic structure of our language is such that there can be no total disjointness between fields. I can make my point clearer if we recall a distinction made earlier in the text between "superfields" and "proper fields." It may be that all semantic fields overlap in some fashion, or extend into neighboring semantic fields so that one may speak of the entire semantic

structure of a language as constituting a single, extremely large super semantic field. Proper fields may be spoken of as subsets of a superfield. And the superfield which would be large enough to include all proper fields as subsets would be the superfield representing the entire semantic structure of a given language. A superfield need not be so inclusive. Any field which has as a (proper) subset a proper field would be a superfield. My claim then can be restated as follows. Metaphoric transfers are effected over proper fields. Thus two proper semantic fields might intersect at a given point, but this point of intersection may be insignificant in the context relevant to the metaphor. In this regard my own view differs substantially from that of Goodman, for I want to claim that where two fields intersect substantially, or where one field can be viewed merely as an expansion or contraction of another, then we no longer have two proper fields, and any resultant transfers of meaning are not metaphoric.

The transfers which Goodman discusses in this connection are ones which take place within a proper field, rather than across such fields. Included in this account are hyperbole, litote (understatement), overemphasis, and underemphasis as well as irony:

In hyperbole . . . an ordered schema is in effect displaced downward. The large olive becomes supercolossal and the small one large; labels at the lower end of the schema (e.g., "small") are unused, and things at the upper end of the realm (the exceptionally large olive) are unlabeled in this application of the schema . . . In litotes, or understatement, exactly the opposite occurs. (*Languages of Art*, pp. 82-83)

Goodman's representation of these relations is reproduced below. See Figure 16. (Notice that all these transfers of meaning are among words which bear a paradigmatic relation to one another.) Goodman considers these transfers metaphorical; I do not. To call a superb performance, "pretty

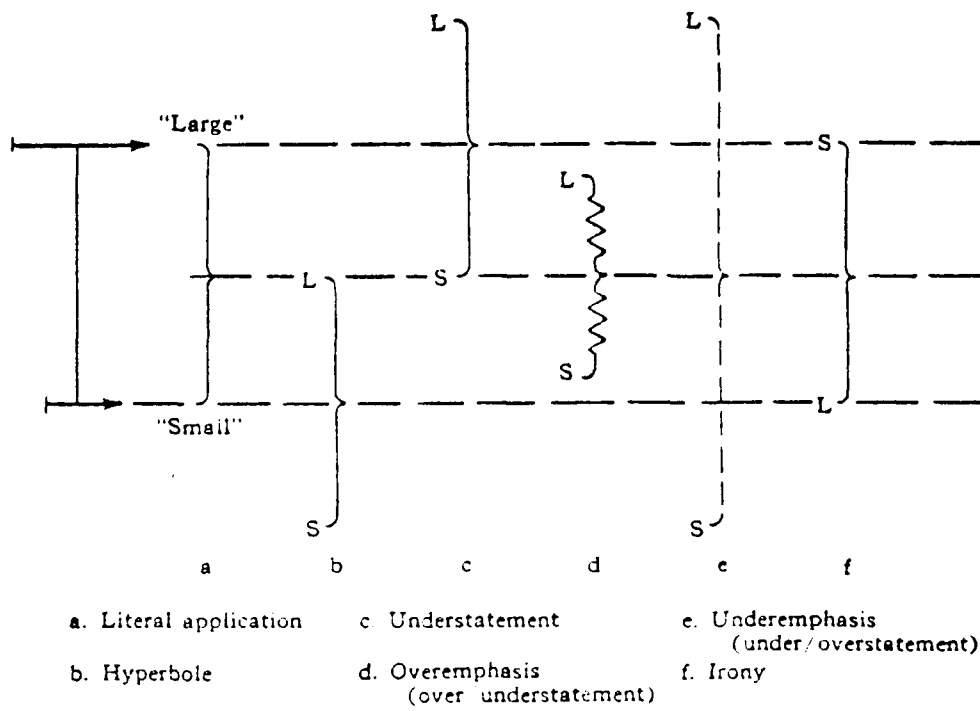


Figure 16

fair" and a good one "passable" seems to me to be not at all metaphorical: the relative measure which establishes the norm is simply displaced.¹⁸ I find Goodman's use of the term "metaphor" to cover these transfers odd and unsupported by common use or traditional rhetorical categories.

Within a given proper field the relations governing that field may be re-ordered by lexical and conceptual processes. Figure 16 represents some of these possibilities. Let us take as an illustration one of the transfers Goodman cites, irony. Irony (often not considered a figure of speech, but rather a figure of thought) is a transfer of meaning within a single semantic field such that the relation among terms of that field are reversed. For example, consider the case of a syntagmatic field such as that of fishing. We will say, for the sake of simplicity, that the field is represented as follows, Figure 17.

Figure 17

<u>AGENT</u>	<u>VERB</u>	<u>PATIENT</u>
fisherman	catch(es)	fish

If we say, instead, that the "fish caught the fisherman" we have an ironic statement in which the positions of the *Agent* and the *Patient* are reversed relative to the verb. Another example, a paradigmatic one, would involve Socrates' claim in the opening of the *Apology* to be using plain speech rather than eloquence in his defense. This is ironical because although he uses little figurative language, his speech is most eloquent. In the paradigmatic field of words referring to eloquence of

¹⁸I grant that to call an olive (no matter how large) "super colossal" seems somewhat metaphorical, but I suggest this is not because of the hyperbole, but because of the term "colossal." Colossal is not a usual word in the range of sizes applied to edibles, but is transferred from the set of words pertaining to things of extraordinary size, power or effect.

speech, we would find a graded antonymy between plain speaking, at the low end of a scale, and eloquence at the uppermost end. Socrates' irony is to reverse the relation so that plain speaking occupies the higher position and eloquence the devalued, lower, position.

Often ironical reversals have the effect of breaking down established oppositions and setting in their place new ones. If a fisherman has so devoted himself to catching fish that the rest of his life has been obliterated by this one activity, and if, in addition, he fails to catch fish, one might utter, ironically, that this fisherman has not caught fish but that the fish have caught the fisherman. The opposition of *Agent* and *Patient* is no longer that of fisher to fish, or even fish to fisherman, but fisherman to himself, i.e. what the fisherman has done to himself by means of his obsession with fishing.

When Socrates says his speech is plain, not eloquent, he adds "unless the truth itself is eloquence" (*Apology*, 17); he thereby breaks down the opposition between eloquence and plain speaking, making them identical with regard to truth and opposing them instead to falsity. When such realignments of oppositions take place, it is often by means of an extra conceptual domain that the new oppositions are established.

Some ironies explicitly involve metaphoric crossing of fields. To call the blindman a seer is an irony and a metaphor, for in the domain of visual capacities, blindman and seer exhibit the antonymous relation of complementarity--he who is not blind sees, and he who does not see is blind. To say of a blind man that he sees is thus ironical (if not simply false). But seer is in the field of terms of prophecy and knowledge and involves the metaphorical use of see to describe "having knowledge or

understanding" and in this metaphorical transfer, the blindman would be he who lacks knowledge or understanding. But by means of the ironical reversal, the blindman is the one who has knowledge and thus is the seer. There is also a play on the level of the signifier utilizing the productive device of adding (e)r to a verb to transform it into a noun, such that the resultant noun is normally the agent of the activity of that verb, on the one hand, and the distinct meaning of seer as synonymous with prophet on the other. See Figure 18.

By pursuing such an analysis of irony, we may conclude that all nontrivial ironical reversals do in fact involve some other field besides the one within which the reversals of relations occurs. At the very least this may be true of the case where the reversal is only a first step toward a new alignment of oppositions. By means of the combined irony and metaphor, the opposed elements are not simply reversed, but the very opposition is rendered inadequate and replaced with a new one.

Another group of transfers within fields (ones not included in Goodman's account) are the various types of *metonymy*. Metonymic shifts of meaning can occur among words which have either paradigmatic or syntagmatic relations between them. *Synecdoche*, a type of metonymic transfer, involves the paradigmatic relation of part-whole, e.g. sail for ship. Metonymic transfers may involve various other paradigmatic relations, such as overlapping segments in the metonymies a "day" for a year, or a "year" for a day. Metonymic associations can move from one co-hyponym to another, e.g. "cake" for bread, from a superordinate to a hyponym (or vice versa), e.g. "my word" for my promise, and from one term in an opposition to another where the transfer is not ironical, antipodally or

Antonyms		
Vision	Blind(man)	See(r)
Knowledge (Prophecy)	Fool Dullard Stupid	Prophet Seer Wiseman
Metaphorical transfer-- vision to knowledge	Blindman	Seer
Ironical reversal	See(r) from vision field	Blindman Seer (from prophecy field)

Figure 18

We can use the relation of privative opposition to illustrate what happens in the above set of transfers. In the original field, the field of vision, we have a privative opposition between blind(man) and see(r). This relation is preserved in the metaphorical transfer, but not in the ironic reversal. In the latter case, the positive and negative values of the two terms are displaced. Moreover, in the metaphorical ironical reversal there are two opposing privative relations. The one who sees (vision field) is blind (knowledge field), thus the one who has the positive attribution in the vision field has the negative attribution in the field of knowledge. But the one with a negative attribution in the vision field has the positive attribution in the knowledge field. Thus the +feature of blind (in the knowledge field) = the +feature of see (in the vision field) and the -feature of blind (in the vision field) = the -feature of see (in the knowledge field), and hence blind acquires a positive valuation while see is divested of a positive value.

orthogonally, e.g. "north" for south, or "south" for east. Metonymic transfers involving syntagmatic relations may be seen in such expressions as "a blond" to speak of a person with blond hair. Here there is the synecdoche of part for whole, blond hair for the person, as well as the metonymic syntagmatic transfer of blond for blond hair. The pugnacious colloquialism "I gave him a fistful" illustrates a metonymic use of the syntagmatic relation between punch and fist. Speaking of the "White House" instead of the President is a metonymy based on the syntagma "The President lives in the White House" where the *Locative* is replacing the *Agentive* role. Metonymies can also involve moving from one semantic field to another, but this generally happens by means of some polysemy or homonymy (or virtual homonymy) on the part of the word which serves as a bridge, as with puns. In extended metaphors, these metonymies will often serve to bridge the two fields involved in the metaphorical transfer.

All these transfers of meaning have catachretic potentialities and many of the examples I have used as illustrations are catachretic, for example "colossal" as an olive size, "a blond" for a person with blond hair. Indeed Quintilian's acetabula example, in which "vinegar flasks" become used as the term of flasks regardless of what they contain, is a metonymic transfer from a hyponym to a superordinate concept. In fact the "gaps" in lexical fields are often filled by such metonymies which become catachretic once they become established in the language.¹⁹

Earlier in a note I gave some modern examples of catachreses similar to the ones Quintilian cites. Pencils are often called "lead pencils" although pencils today are not made with lead but with graphite. (In the *Websters Third International Dictionary*, unabridged, the definition

¹⁹ I owe the observation that metonymies as well as metaphors are subject to becoming catachretic to Umberto Eco in a personal communication.

of lead pencil is "n: a pencil of which the marking material is graphite.") In the case of "lead pencil," the metonymous transfer is from one co-hyponymy in the set of marking substances to another.

I have said earlier that the distinction between metaphor and catachresis is dependent, in part, on whether we have two distinct content planes (in metaphor) or whether two content planes have been conflated (in catachresis). The difference between a catachresis which results from metonymic transfers and a genuine metonymy depends on whether or not the original relation between the two terms involved is operative in a term's current use. If it is, we have a metonym; if it is not, we have a catachresis.

Extensions of meaning, which are the catachretic product of meaning transfers, may then be metaphoric (without being metaphors) or metonymic (without being genuine metonymies)--that is, they may take place across fields (which are then conflated) or they may take place within a field.²⁰ Extensions of meaning which have lost their figurative aspect may be spoken of in terms of the notion of obligatory and optional features, which we introduced earlier in the text. If we accept the claim of Adrienne Lehrer, that terms have both obligatory and optional features,²¹ we can say that many shifts in meaning occur when obligatory features become optional and optional ones become obligatory.

²⁰ A writer such as J. Szrednicki in "On Metaphor" (*Philosophical Quarterly*, 10, 1969, pp. 228-237) is correct in protesting some facile assumptions concerning extensions of meaning, i.e. that such extensions are always the product of metaphor, for they may be the product of metonymy as well.

²¹ This is a concept which has, I believe, received far less attention than it deserves.

The notion of analyticity becomes relevant here. If we take a favorite example of analyticity, "bachelor" as meaning "unmarried male," we can say that bachelor has as its obligatory markers [Unmarried] and [Male]. However, optional markers might include [Young], [Independent], [Eligible for Marriage], [Sexually Available]. For when we say, "He is quite a bachelor!," we are certainly indicating something beyond the fact that this person is both male and unmarried²²--we are invoking one or more of the concepts I have suggested as an optional marker. Given the current sociological climate, we can well imagine the metaphoric term "bachelor-girl" becoming standard, and even losing its trace of metaphoric origin so that "bachelor" would be the unmarked term indicating either 1. an unmarried person, a male or female, who also has one or more of the attributes suggested by my hypothetical optional markers, or 2. an unmarried male. In addition, we may have the marked term "bachelor-girl" or "bachelor-woman" which would be in contrast both to "spinster" and to married woman. Thus we might say that what is analytically true of a given term is expressed in the obligatory features while the optional features reflect both linguistic and extralinguistic information useful in determining a particular sense of that term. However, as Lehrer points out, the set of obligatory features are not always sufficient to distinguish two different terms within a given semantic field. (See Figure 6, Chapter 1.) Therefore, what is analytically true of a word may be insufficient to establish the meaning of that word relative to other words in a semantic field. Moreover, analyticity would lose its associated attribute of

²²The latter set of markers would not appear even as optional markers in spinster, although spinster is the female equivalent to bachelor as ([Unmarried][Male]).

invariance through time, for the analytic meaning of a word can shift from its obligatory to its optional features, and in time, all the obligatory features may become optional while the optional ones become obligatory. Because the meaning of a word is not a single entity but a composite set of relations that is subject to change over a historical period and modification relative to given language communities, we cannot continue to regard analyticity as an "eternal" property--universal and timeless. For if we do so, we are forced to say of a mere shift in a word's meaning that two homonyms result. Such a view ignores the subtlety of meaning changes both through time and through figurative uses, making it difficult to understand how we are able to comprehend a word's meaning through these changes.

Catachresis, whether resulting from metonymic changes or metaphoric ones, can be described as a shift in meaning from the obligatory to the optional components.²³ Thus in the catachretic "foot of a mountain," foot simply has the meaning of "base" or "bottom"--a component which may be optional given another use of the word "foot," e.g. as a part of the body of a human or other primate.²⁴ When a metaphor becomes catachretic,

²³ Some writers believe a version of a thesis that metaphor is also a shift from some important and central features of a word's meaning to some more peripheral one. Bloomfield, as we pointed out early in this essay, held that words had a central meaning and a secondary meaning and that metaphor and meaning change resulted when the secondary meaning was taken as, or became, the primary meaning. Mary McCloskey ("Metaphors," *Mind*, 73, 1964, pp. 215-233) believes that metaphoric uses of words depend on the peripheral meanings of those words.

²⁴ Even such catachretic uses as "the foot of the mountain" can, in the appropriate context, be revived, so that their metaphoric origins are recalled and utilized to give the expression a renewed interest. In Baudelaire's poem "La Geante," the poet says he would have loved to live near a young giantess, "As a voluptuous cat at the feet of a queen." He then speaks of her in terms appropriate to a mountain, e.g. "Climb

it moves permanently into the field of the principal content, losing its manifest content along the way: "foot of a mountain" is a standard part of the semantic field of mountain terms. To extend a metaphor Goodman employs we can say that a term used metaphorically (as a novel metaphor) is a visitor in a new land who can choose to remain as a resident alien (a standard metaphor). Occasionally, such a term becomes a naturalized citizen and then we have a full-fledged catachresis of metaphoric origins.²⁵

There is, I believe, one genuine exception to the claim that metaphor always involves two semantic fields. It is possible that the principal domain may be one which has in fact never been articulated by a lexical set. It may be an entirely new conceptual domain, a conceptual domain virtually unexplored and hence unnamed. Such was the phenomenon of electricity when all our knowledge of it consisted of a few isolated facts, e.g. that a rubbed piece of amber will attract small bits of paper.

²⁴ (cont.) - in the slope of her huge knees." At the end of the poem he writes that "when the unhealthy suns,/. . . make her stretch out across the country," he would like to "Sleep without a worry in the shade of her breast,/Like a peaceful hamlet at the foot of a mountain." In the poem, we begin at the "feet of a queen," "*aux pieds d'une reine*," climb up her immense body as we would climb a mountain and return to "the foot," this time "the foot of the mountain," "*au pied d'une montagne*," a catachresis which here facilitates and even seals the metaphoric juxtaposing and eventual identification of giantess and mountain. Moreover, the catachresis is returned to its metaphorical origin so that we see the mountain as a being with corporal parts like our own. That is, we see the field of human-like body parts as the manifest field for the principal content of the topography of the mountain, and we see what might motivate the use of this manifest field for this principal content, namely the voluptuous, yet peaceful sense of lying at the foot of a 'giantess.'

²⁵ These naturalized citizens may have children who are then simply normal citizens, natives, but second-generation, of immigrant parentage--e.g. a chair stands on its legs.

The lexical field for electricity was at first comprised largely of metaphoric borrowing from such diverse fields as light, magnetism, running, hydraulics, etc. These metaphors did not re-order a previously ordered and articulated semantic field but ordered a conceptual domain which became articulated by virtue of the combined effects of empirical investigation and semantic transfers from other semantic fields.²⁶

On the previous page, I introduced the distinction between novel metaphors, standard ones, and catachretic, or dead metaphors. It has been suggested²⁷ that the metaphors which remain in the language, but eventually become dead metaphors, are ones for which the metaphorically transferred term remains the only term in the language which expresses that concept, or set of concepts. This happens when we have a conceptual domain which is newly discovered and explored and which previously was not articulated by a lexical field, as was the case with electrical terms such as circuit, current, and attraction. It may also happen when there is a gap within an already articulated conceptual field. This is particularly true if the gap is made prominent by the metaphorical juxtaposition of its field with some other semantic field. For example, in the sentence

I arrived at the idea

²⁶ Many contemporary metaphors are ones in which the manifest field is electrical and the principal content is that of fields which share terms with other fields which originally were used in articulating the field of electrical terms. Consider the metaphor, by now standard, of being "turned on," in which an electrical term is used to speak of what belongs to a field of libidinous concepts, a field with which electricity shares such terms as "attraction" and "repulsion."

²⁷ Harnish via personal communication with Adrienne Lehrer.

the conceptual domain of "idea" lacks a term indicating the concept expressed by the metaphoric use of the words "arrived at." Other terms used similarly, as in the following sentences,

I came to the idea

The idea has occurred to me,

are also metaphoric and are all near synonyms in the lexical field of motion. I have called all these sentences metaphoric, but they are hardly metaphors any longer. Only by a very conscious effort do we detect two conceptual fields as operative. Arrived at, came, occurred are all dead metaphors.

The criterion for distinguishing metaphor from non-metaphor is the one I have just utilized here: can the two content planes of a connotative semiotic be distinguished and seen as operative? This criterion is valid regardless of the novelty of the particular use of a given expression. An active metaphor, be it novel or standard, has two distinct and distinguishable content levels, each from distinguishable (though not necessarily completely disjoint) conceptual fields. A novel metaphor employs two fields rarely brought together or rarely brought together in such a way as to effect the particular transfer of relations effected in that distinct case. Thus while habit and use can diminish the potency of a metaphor, it does not necessarily vitiate its status as a metaphor. With age and use a metaphor may indeed die²⁸ or it becomes standard. However,

²⁸

This is in contrast to such views as that expressed by Sandor G.J. Hervey that "a metaphor is the first and novel creation of a 'homonym' from a sign already established in a given language" ("Notions in the Manipulation of Non-Denotative Meaning in Speech," *La linguistique revue internationale de linguistique generale*, Vol. 7. Fascicule 1, 1978, presses universitaires de France, Paris). Indeed Hervey takes the above to be a definition of metaphor.

given the proper context, the metaphor may be revived. This would be true of a context in which the original conceptual field of the manifest sign is present in the linguistic environment, or when the non-linguistic situation can easily be rendered in terms of that conceptual field.

Thus among metaphors one can distinguish active ones from dead ones and novel ones from standard ones. The two distinctions are fairly independent. Although a novel metaphor will be active as long as it is novel, if it remains in the language it may become standard like e.g. "iron will," "light" for understanding, or it may become dead, e.g. "river-beds," and many technical terms, e.g. "force" in physics. It is an interesting question for diachronic semantics and psycholinguistics to discover why a metaphor stays in the language and, if it does, why it becomes either dead or standard.²⁹

²⁹There are also cases where one usage is considered metaphorical in one language community or dialect but considered literal in another example.

Concluding Remarks: The Cognitive Force
of Metaphor

The reordered field of the principal content is, I am assuming, a reflection of changes which take place in our conceptual schematization of experiential reality by means of metaphoric meaning transfers. These changes may be extremely transient, lasting only for the period of the utterance itself. They may, however, result in or reflect a significant reordering which can offer a better "fit" to our experience than the former conceptual field, and thus be descriptive, even predictive. If, for example, we adopt Donne's view of "idyllic courtship," we can attribute such descriptive efficacy to the poem's central metaphor, courtship as "fishing"--with its predictive features in its implied description of the progression of a courtship. Similarly, Wordsworth's poem may be said to have descriptive efficacy, in addition to its prescriptive injunction to honor "even the shade/Of that which once was great"

Metaphor can have great heuristic power, as in the midwife metaphor, suggesting new explanations and novel courses of action. And even the most transient metaphor can make us realize new connections, create new unities which will form the basis for future thought.

This essay is entitled "The Cognitive Force of Metaphor," and yet I have talked little about cognition, or how metaphor helps us to have knowledge of the world. Knowledge, to follow the model set for us in the midwife metaphor, consists of two distinguishable moments: one is the having of the thought, the second is the testing of the truth of this thought. Truth or falsity concern reference--the reference of the thought or the statement of that thought; thought involves meaning

and the concepts from which meaning emerges. One can speak of the truth or falsity of metaphors: and, speaking literally, the question is trivial, for most metaphorical utterances, when taken as literal statements or referring expressions, are literally false or fail to refer. There does seem to be some sense in speaking of the truth or falsity of metaphors if we are willing to stretch "truth" and allow for "metaphorical truth" with all the ambiguity that the phrase suggests. I prefer another course: I propose that the truth or falsity of metaphor be considered secondary to the question of the meaning of metaphor. Using the midwife metaphor, I as a philosopher want not in this case to see if the idea born is true or false, but to ask about what has happened during its gestation period. Many true thoughts have evolved from the metaphoric realignments of concepts that occur during gestation, as we would see if we were to look at the history of science and examine the metaphorical origins of many of its central positions.

In science the systematic exploitation of a metaphor is a model. A model, which has metaphoric meaning, is distinguishable from other metaphors in at least two ways. The first is a question of scale. While a metaphor focuses on one or several terms in a semantic field and the relations it or they bear to neighboring terms, in a model, an entire semantic field (or the greater part of such a field) is employed as the manifest sign for some principal content, which again is an entire semantic field (or virtually an entire field). But this difference in scale has important repercussions for the conceptual usefulness of a metaphor and for its aesthetic qualities of novelty and surprise. For the more terms and the more relations which are involved in a metaphoric transfer,

the more difficult become the successful realignments; that is, the more difficult it is to carry forth the play in a consistent manner. And we must recall that increasing the number of terms involved in the transfer produces not an arithmetic but a geometric progression in complexity since each term enters into several relations.

Consistency is not always desirable, as in the Donne poem where the inconsistency is itself significant. In poetry such consistency can even become tiring and, unless accomplished with great skill, soon begins to sound contrived. We begin to sense that the content plane has taken over the organization of the expression plane and the metaphor begins to be superfluous. Because of the difficulty in maintaining a play on the level of expression through the use of many terms of the manifest field, extended metaphors are often unsuccessful. The too perfect fit between the two content levels reduces the tension necessary for poetic metaphors, the sense of the incongruous which keeps our aesthetic sense alert and alive. However, in the systematic use of metaphor in science, such consistency is generally desirable. In this we see the second difference between a model and other metaphors.

In its poetic use, the metaphor's two principal planes are held in a tension borne by the incongruity of using that expression plane for that content. And the poetic effect is generally heightened by this tensive opposition, whose effect, after all, is to focus on the plane of expression as expression (as Jakobson suggests the poetic function of language to be). In the scientific use of metaphor, the paradigm of which is the scientific model, the aim is to bring the expression plane in line with the content plane. In science then, the eventual conflation

of the connotative structure into a denotative one is desirable for only the latter is capable of truth conditions. (Such a denotative structure would presumably be the successful theory insofar as it consists of true or falsifiable statements of fact.) To the extent that such conflation is feasible, the model loses its heuristic power. The plane of expression becomes fixed to the content of the theory's statements, and there is no more play which can inform us as to the possibilities yet to be explored and ultimately tested. Thus, even in the scientific model some tension between the two content planes is needed. But the disparity must not be too great, for if there is not sufficient fit between model and theory, between manifest field and principal field, then a play on the manifest field may be in vain, with no ultimate applicability to the referent. In a scientific model the dialectic between conjointness and disjointness (which we have taken until now as a precondition of a language in which metaphor is possible) is reflected as a dialectic between conflation and tension; but the pull is toward conjointness and conflation.

The poetic metaphor and the scientific model are two poles of connotative metaphoric structure. In the former the desideratum of the tension between the two planes of the principal sign is the strongest, in the latter it is the weakest. Moreover the sort of efficacy sought in these two different uses of metaphoric meaning are different. In poetry we create a self-sustaining entity which points to itself, whose thrust, as Northrop Frye says,¹ is centripetal, rather than centrifugal. A metaphor used in poetry is a fusing of the diverse to create a unifying

¹ N. Frye, *Anatomy of Criticism*, (Princeton, N.J.: Princeton University Press, 1957), pp 73 ff.

entity. The efficacy of a poetic metaphor may be descriptive; ultimately, it is creative in the sense of having created a new entity by virtue of the "improper" naming. In the scientific use of models, the use of the manifest field to speak of the principal content has an explanatory or predictive efficacy. This is not to say that it is an explanation, only that it is used with an end to finding an explanation. In science the use of a connotative semiotic is to reveal common structures among diverse phenomena--a feat accomplished by the relational transfers of which we have spoken. The common structural features of substantively dissimilar things allow one to take the relations which constitute the structure of the model, or the manifest field, as constitutive principles of the principal content. Thus the play in metaphor, the exploitation of relations on the expression plane, is its conceptual work; for through this play new possibilities are revealed.

The opening of new possibilities, metaphor's exploratory efficacy, is not reserved for its scientific employment, but is characteristic of metaphor in all its various appearances. For by the consequent reordering of conceptual domains, metaphor provides us with newly formed nets by which to capture the flux of phenomena.

Our discourse uses both poetic and scientific metaphors, but the use of metaphor is not exhausted by these two poles. Metaphor sometimes has the more modest conceptual import of serving as a means of economizing--allowing one lexical set to label and organize a number of different phenomena, thus unifying and simplifying, serving us mnemonically and didactically.

But the connotative structure of metaphor can have a very different

sort of efficacy, one which we find in magic and ritual. In magic the manifest sign is often seen as being causally related to the principal content, so that a manipulation of the field to which the manifest sign belongs will be thought to effect a change in the principal field. This, I suggest, is the basis of much magic and most especially word magic. In word magic we see the word used, not as something which is merely an expression for some content, but as an entity in itself with a latent potency over that which it signifies. As such an entity, it cannot be said to be a mere signifier; it has itself a content and is furthermore used connotatively to signify something else. For one who believes the relation between the two content levels to be causal, the manipulation of the expression plane of the principal sign should be sufficient to bring about desired changes on the principal content plane, even physically realizable consequences. This is not the place to defend such a view of magic. I simply want to suggest still another possible way to conceive of the relation of efficacy between the principal content plane and the principal expression plane of a connotative semiotic.

Another place in which we find the connotative semiotic of metaphoric meaning is in the structure of dreams. Freud speaks of the manifest content and the latent thought in dreams. My own decision to call the principal expression plane the "manifest sign" has been motivated in part by the similarity I perceive between the manifest sign, in my sense, and the "manifest content" in Freud's sense. The images of which our dreams consist, carry information, but it is a signification which hides under the guise of a manifest sign. Freud has described the relation between the manifest and latent contents as a series of transformations

and displacements related to wish-fulfillment and to the strength of the censor within our minds. The dreams are often a spinning out of the manifest content, and their interpretation depends on a correct assignment of a latent content to the manifest sign. With such interpretation we learn about the workings of the unconscious. Indeed, it is one of the very few ways we can learn about the unconscious. The reading of symptoms of neurosis and the pathologies of everyday life are similarly assignments of a second content plane to a sign which, when read as a denotative sign, is peculiar, incongruous in some fashion. For the dreamer the efficacy of the employment of a manifest sign for a principal content is as a disguise, a subterfuge, allowing him to engage in wish-fulfillment. For the analyst, the efficacy is descriptive, predictive, of the dreamer's state of mind or course of action. For the analyst, the correct reading of the connotative semiotic provides him with knowledge of his patient. In this regard the analyst moves in the direction of conflation. The connotative semiotic of the dream image is conflated into the denotative Freudian dream "symbol."

The above remarks should indicate that the efficacy of using a semantic field to speak of another such field is diverse. A comparative study of connotative structures would elucidate the value of the mediation afforded by metaphoric meaning. I view the present theory of metaphoric meaning as a prolegomenon to such a study of connotative systems.

In the brief exposition of the applicability of a theory of metaphoric meaning, we have seen that in all its possibilities for conceptual efficacy metaphor touches upon the referential only circuitously--through the double semantic relation of the connotative semiotic. Metaphor concerns

what we think about the world, and only secondarily what we know about the world. Through metaphor we can change what we know about the world, but only through the mediating move of changing how we organize the conceptual apparatus through which we assimilate the data of experience and thus "know." When the appropriate relation between the two content planes is invoked, metaphor has a cognitive force--but it is cognitive through the perspectival glass of a connotative semiotic.

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