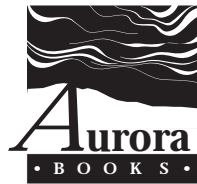




The Quality Project:

**Intimate,
Metaphoric and
Catachresic Qualities
in Design**

by Jerome Diethelm



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Today we have the naming of the parts.
Tomorrow we'll have meaning...

from 'The Naming of the Parts'
by David Waggoner

The Quality Project

Intimate, Metaphoric and Catachresic Qualities in Design

by Jerome Diethelm

Designers like all language users engage their world by thinking about it through concepts. These transparent mental constructions discretely direct and focus the attention, and with their built-in capacity to filter, sort and interpret experience help to generate a world. And because the central concepts of any field are such controlling check-in check-out points of its constructed understanding, knowledge and reality, vocabulary matters. Truth and what is meant by truth, for example, is at the very heart of the inquiry into a belief in objective reality that began in the 17th century I call "The Reality Project." Quality, I believe, plays the same role for design and designing and is therefore the name chosen for this planning and design theory project.

The Quality Project has several main objectives, all in service to a larger, longer-range goal of creating and improving intellectual tools for design thinking. The first is to map out the territory of the concept of quality, an idea so useful, pervasive and taken for granted in design and planning that it rarely peeks above the horizon of our habits. Once it has arisen it becomes disturbingly clear that the disarmingly simple question, *What is a quality?* leads to more than a simple answer. The chart I've developed to describe the naming of the parts lays out its multiple and simultaneous uses, modes and meanings. It also serves as a schematic outline for discussing the intellectual history of the concept and my own speculations.

A second objective of this project is to focus on and fill out the quality concept as it is used intentionally in environmental planning and design. Mapping the idea

leads to some interesting new parts. To this end I first chart and discuss the more familiar but not uncontroversial territory of the idea, and then go on and intrepidly explore, name and settle the parts still terra incognita. Here, in the spirit of trying to generate fresh ways of talking about designing, I propose two new "kinds" of quality and add them to the traditional three. Because this process yields a corresponding blank region (quarter III) in the map model I am led to speculate further about the nature of design evaluation in experience as it relates to these neologic qualities.

Finally I try to point out some important differences between The Quality Project and The Reality Project because I think these distinctions may be important to the evolution of design theory, research, teaching and practice.

The Map of Quality in Environmental Design

Although it is not immediately obvious, the map is divided into four halves and four quarters. The quarters are numbered I-IV and the halves double when they are read as northern, southern, eastern or western double-quarters. On the Q world chart, the eastern half is labeled kinds: primary, secondary, tertiary, metaphoric and catachresic qualities. All are discussed below with the greater emphasis on the new kinds being proposed. All but primary qualities are considered "intimate" because by definition primary qualities actively avoid this trait. All of the other kinds are highly social, environmentally social, in their relationships.

The western half of the Q is labeled measures and consists of the usual normative array of poor; good; better; best; and the proposed: excellence of metaphoric expression; ("profound likenesses"); excellence of catachresic expression; and meaningfulness.

A "tropic" drawn vertically through the western hemisphere has been labeled a "tropic of excellence," its counterpart in the east, a "tropic of kinds." "Tropics" drawn horizontally through the northern and southern halves produce a less

Linnaean generic sorting. In the north a "tropic of description/evaluation" unites the quarters and represents the way that quality is commonly used in speech, writing and - by extension - design thinking. A southern horizontal "tropic of composition/evaluation" unites the metaphorically based quarters of environmental making and meaning.

After an orientation to the parts, a mental overlaying and folding of the map produces some interesting image concepts of the hard-working, polysemous concept of quality in action. Polysemy, which means having or characterized by many meanings, accounts for some of the complexity related to the multiple faces of quality but falls short of conveying the way that these are simultaneously woven together in experience to make a more self-conscious and self-reflecting whole.

Simultaneous Polysemy

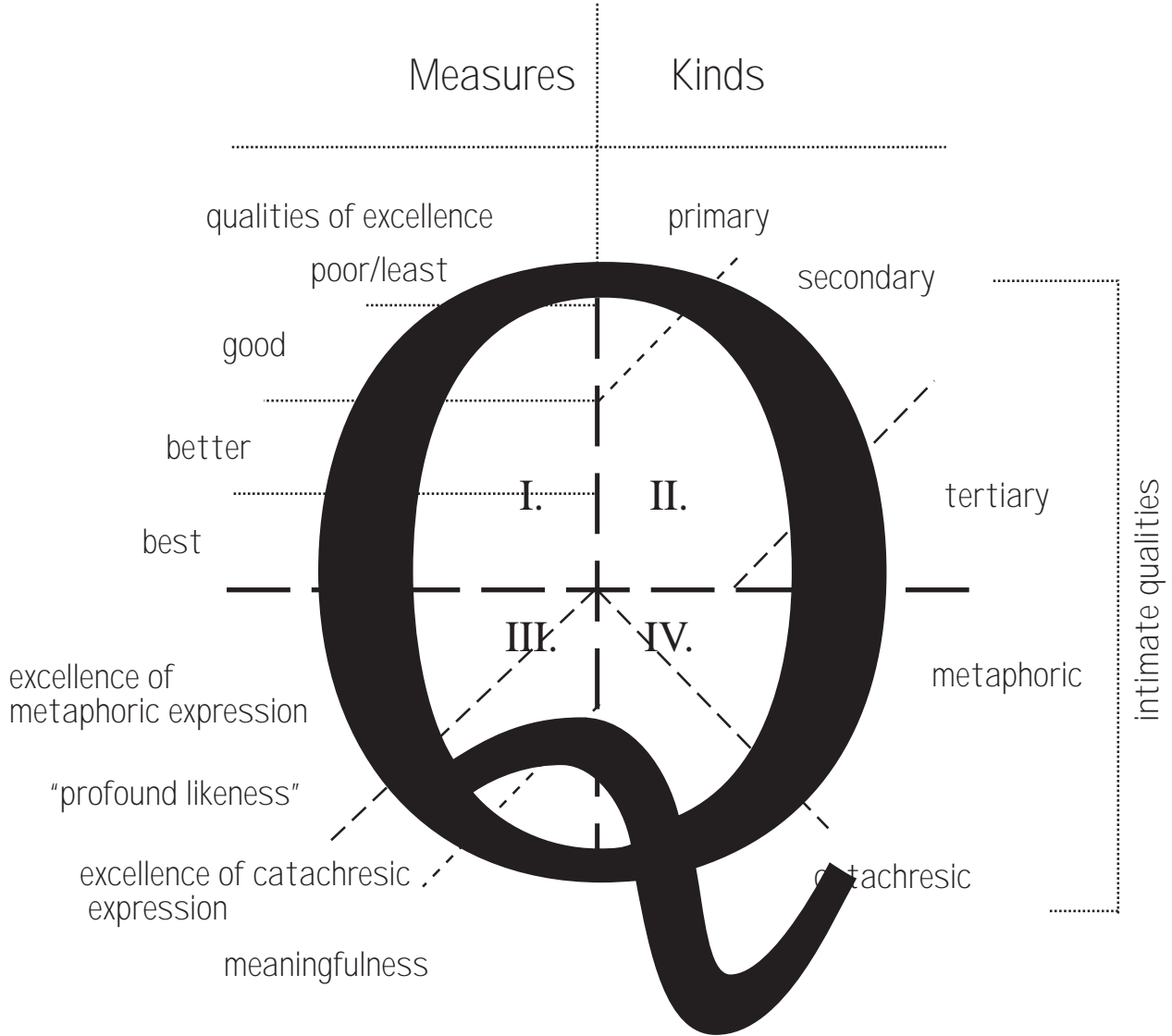
Consider this ordinary sentence paragraph from the morning newspaper:

Drab, mostly empty cubicles lie off a hallway of chipped stone and crumbling concrete, the look of second rate office buildings all over China.¹

A cursory inspection of the writing reveals the presence of all three of quality's classical categories: these are the familiar primary, secondary and tertiary qualities. Additionally, the sentence contains an evaluation of the poor state of maintenance in Chinese office buildings, and includes an opinion about their pervasive overall lack of quality.

The buildings are described as drab, empty [feeling] and standardized - all easily recognized as tertiary qualities. The journalist, reporting out of her experience, is comparing Chinese office buildings with better examples in other countries (These first person comparisons create secondary qualities). There are cubicles, hallways and buildings of stone and concrete (all primary qualities). The quality of stone (degree of excellence) is

QUALITIES



Map of Quality in Environmental Design

chipped and the concrete crumbling, adding up to an overall qualitative assessment (the quality of the whole) of second rate.

Taking stock we find that this short sentence effortlessly and quite naturally mixes five kinds of quality: three levels of description (primary, secondary and tertiary qualities) and two measures of qualitative excellence (quality of parts and quality of wholes). In a quintet of semantic interplay, descriptive and evaluative qualities are seamlessly interwoven to create the larger whole. This commonplace of everyday writing about places typifies the way that people think, write and speak. And it parallels, I believe, the way that designers naturally employ the quality concept in design and designing.

Another important component of the sentence is its intentionality. It is hard to guess, for example, from the decontextu-

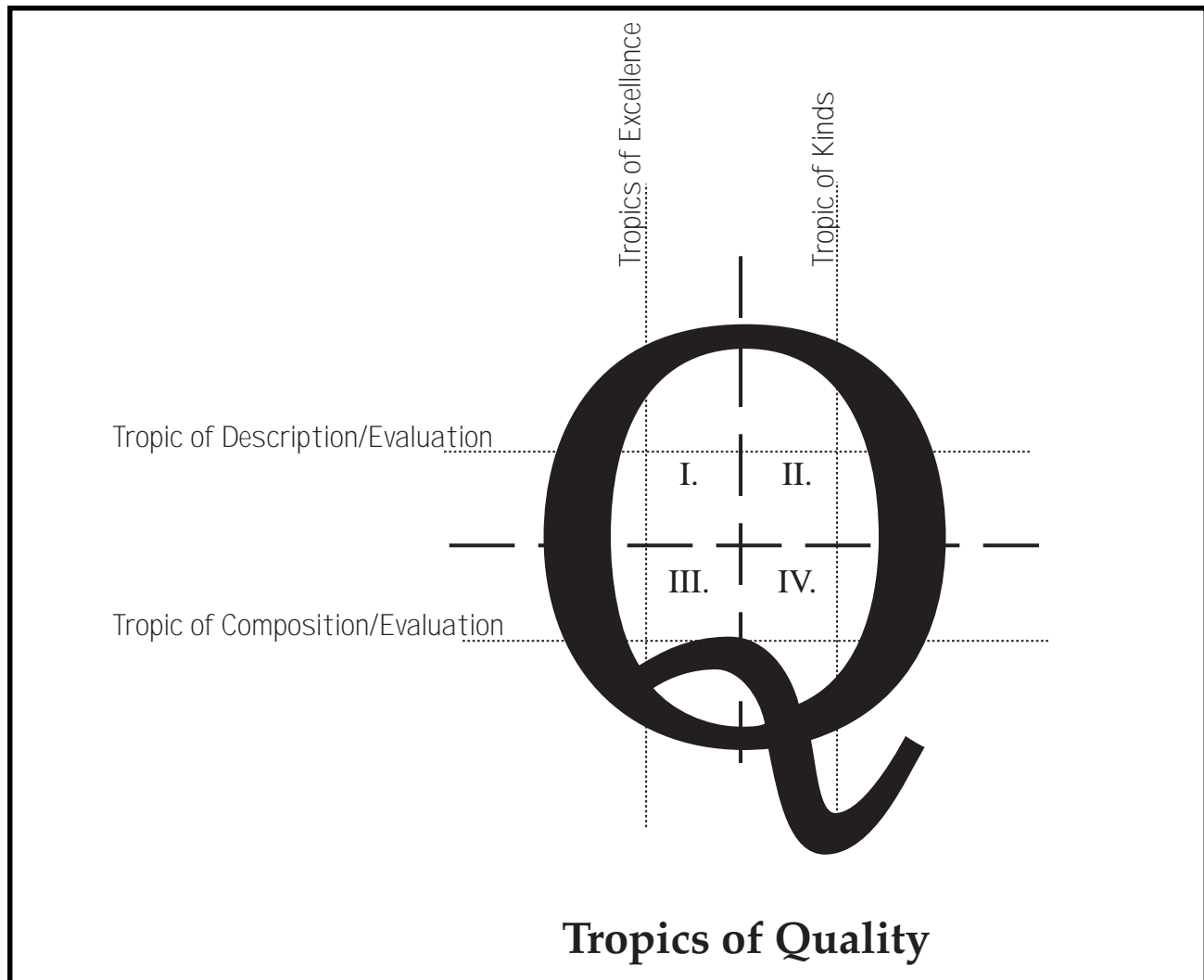
alized fragment what the point of view of the quoted sentence might be – the impossibility of adequately caring for the environment of a billion people? the cultural toll from copying Soviet modern architecture? the failures of a command economy? – but it is obvious that there is one - and probably more - driving the thought. It is also hard to guess the author's overall intent, what she hopes the article will accomplish, what her purposes were in writing it, but it is equally obvious that what the author is about is intimately connected to the perceptions and their reporting. And "aboutness is all you need for intentionality,"² according to philosopher Richard Rorty.

The Map of Quality in Environmental Design represents the aboutness of quality with it's northern and southern halves conceived as floating in a sea of graduated intentionality. The northern half is more implicitly intentional because the

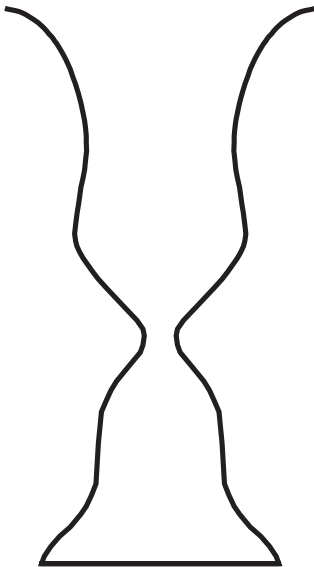
situational use of qualitative description/evaluation can be ever so quietly purposeful, in service like the quoted sentence to whatever one is about, even when that purpose is not consciously apparent. The qualities in the southern half are blatant in their intentionality. Metaphoric and catachresic qualities are part of the directed dynamic of changing places.

Polysemy has long been a bane to artificial intelligence, A-I, attempts to computerize language comprehension and translation because machines must serially step through contextual possibilities to uncover the intended meaning of a polysemous term. Expanding the trio of kinds of quality into a quintet, as portrayed in the map, will add new, unsought dimensions of difficulty to the contextual sorting task.

Until recently it was thought that human comprehension of the difference



between the literal, polysemous and metaphoric uses of a term was also serial in nature, meaning that the mind checked first one use and then another the way a machine would have to do. But cognitive studies have found no evidence of greater amounts of time being needed to process multiple meanings or any time delay at all in discerning the literal from the figurative.



FACE(VASE)S³

Daniel Dennett in his neo-behavioral way describes this operational capacity of the mind as massively parallel. We are able to work on a number of mental planes at once and make simultaneous connections between their complexities. And - most amazing of all - such organic activity generates in ways we can't yet explain what we experience as a mental field of self-awareness and describe as consciousness.

Here in the familiar vase/faces diagram is a visual example of polysemy. The image can be seen as faces, or a vase, and together as faces conversing about the quality of the vase that they are making. Writing and speech which are essentially serial, "like clothes strung out on a clothesline,"⁴ never quite capture the laundry basket overlap and dryer-like tumble of thought, but they approximate it through mixed-use narrative as in the example given. Visual experience has the intrinsic capacity for simultaneity and can be trained to expect to see the both (and

more) at once. The Face(vase)s diagram is the key to the Map of Environmental Quality.

Mentally folding the map in half, for example, along its north-south and equatorial axes provides a graphic illustration of the simultaneous occurrence of kinds/measures and descriptions/prescriptions in the everyday use of the quality concept I have tried to describe.

I label the simultaneous use of quality in the northern half of the map, description/evaluation, because I see it as a better representation of the qualitative assessments of environmental situations made by users and/or their agents who inevitably have (and need to be conscious of) multiple interests, purposes and points of view.

The southern half has a "tropic of composition/evaluation" for the same reasons. Focusing on the lower half of the map for example, the "right face" (sector IV) of integrated metaphoric expressions in compositions such as environmental plans, policies, and places, combines with the "left face" (sector III) of measured catachresis excellence in experience, to create - not the reality of The Reality Project, but a more intimate and familiar unity to designers - the reality of intentional environmental experience.

Intentionality in design is an extremely robust concept that links normative and consciously constructed intentional structures, directed social commitment and the imaginative creation of formative expressions to the interpretation of their meaning in experience. This larger whole unites the "what needs doing" environmental differentials of human valuing to their catachresis expressions. I try to explain the role of metaphoric and catachresis qualities in this process because I believe they are central to an understanding of *how* designs are value-expressive.

But this complex use of the map and discussion is premature, not well-enough grounded in its expanded vocabulary of quality. A more systematic description of the kinds of quality, especially the newer intimate kinds with their consciously reflective and complementary measures, reveals important differences of perspective on reality, new roles for such old standby concepts as truth, knowledge and

meaning, and new working concepts for designers.

Primary Qualities

John Locke built on a tradition that reached back through Descartes and Galileo to Aristotle in his intuition that there were such things as primary qualities. Following the distinctions that Locke made, we still tend to think of primary qualities as those that really exist and all others as functions of human intentionality and perception. Primary status is to be accorded to objectively measurable qualities and secondary to the unquantifiable products of human experience.

And so we can say: primary qualities are the properties of things - objects, systems, mechanisms - that can be objectively identified, located, measured and verified. These are observer independent properties that are said to "just stand there" even when we look away. Primary qualities such as quantity, mass, volume, relation and duration are the charter properties of a disenchanted, dependable, "real world" as studied and revealed through the natural sciences.

It has taken centuries and much suffering to drive the ecclesiastical out of the Reality Project of observing and explaining the world "As It Really Is," not as it appears to be or is according to some authority or doctrine. Filtering out the spirits, the spiritual, the subjectively parochial and the personal has been necessary to close in on the way the world is "in itself." In our scientific culture, primary qualities provide knowledge, certainty and predictability in our relationship with Nature.

Knowledge, Truth and Meaning in their most common and influential semantic meanings are derived from the concept of primary qualities. Real knowledge is objective knowledge; the 'knowledge' derived from other than primary qualities from this point of view requires some form of qualification. Thus the source of the enduring academic dispute over whether the graduate thesis in English Literature or in our own planning and design fields produce true

knowledge. Thus too the phallogocentric distinctions between the hard and soft sciences and the ever softer humanities and arts.

Truth in the discourse of science is one to one correspondence between the world as we describe it and the world "As It Really Is," the last word as it were, as though language and mathematics had an intrinsic and amazing capacity to cut reality at its joints.

Meaning, as it relates to primary qualities, is essentially semantic meaning - literal and unambiguous signification. Language's primary function in the Reality Project, defined as the realization of the Enlightenment vision of a gradual accumulation of knowledge of an objective world - is to serve as a conduit for a truthful and accurate communication about a world prior to and unclouded by human experience. Although meaning is admittedly subject to some initial interpretation (a temporary play of difference, a clarification of context), truthful signification must always come to rest in what Wittgenstein described as the "final interpretation." Tropes such as metaphor add unnecessary and unwanted rhetorical frills and are misleading.

As commonsensible, useful and ordinary as these views are in our culture, they have been under some attack since Kant first began to question the role and location of the mind in our conception of the world. To Kant it was not a matter of thought making the world but the realization that it was impossible to think through no concepts. Non-transcendent minds and their vocabularies were somehow engaged with and within an understanding of reality.

Hilary Putnam, in a recent book⁴, brings this perspective up to date. He says that:

...elements of what we call "language" or "mind" penetrate so deeply into what we call "reality" that the very project of representing ourselves as being "mappers" of something "language-independent" is fatally compromised from the start.... Realism is an

impossible attempt to view the world from Nowhere.

Putnam believes that we should "accept the position that we are fated to occupy in any case, the position of beings who cannot have a view of the world that does not reflect our interests and values, but who are...committed regarding some views of the world...and some interests and values - as better than others."

Such a view, call it the "View from Somewhere," is characteristic of so-called secondary qualities and is a central and coordinating idea of The Quality Project.

Secondary Qualities

In the classical model secondary and tertiary qualities are historically defined as *not* primary qualities. There is a seriously nonnegotiable divider between the first and all the rest, designed to screen out the subjectively personal and the prejudicial. The model progresses from the purely objective to the somewhat objective to the almost entirely subjective. On this view secondary qualities are those that annoyingly cannot be explained without some subjective content and tertiary qualities are yet further removed from the real world.

Color, pain and sweetness are among those qualities usually discussed first in the not-primary quality literature. These are secondary qualities because they cannot be proven to exist in a measurable state independent of any observer. A friend who sees slightly different versions of a color out of each eye is my personal example of this phenomenon. Everyone has a favorite aunt or uncle who bought a green car that turned out to be blue.

Try to tell someone that pain isn't real, but it remains that no two people have the same experience or tolerance of pain and all information about pain is anecdotal.

Sweetness brings out another important aspect of secondary qualities, that of location. We say that sugar is sweet, but where is that sweetness? Is it in the sugar? On the tongue? In the

mind? And the answer lies, not in any specific and objective location, but somewhere in the gestalt of tasting, the experiential whole of taster and tasted that characterizes secondary qualities.

For primary qualities, the ideal observer position in order to arrive at complete objectivity is at a transcendent point - sometimes referred to as an Archimedean point - outside the system under observation. Here observation free of the distortions of experience becomes theoretically possible. In secondary qualities, there is no distant observer or place of observation because of the fusion of observer and observed, valuer and valued, taster and tasted in experience.

If the principle point of view of primary qualities is impersonal detachment, that of secondary qualities is intimacy and involvement. In the former, intimacy is unwanted. In the latter, awareness of the nature of that intimacy is what is wanted.

If primary qualities are third person plural, secondary and tertiary qualities are first and second person historical constructions. The probabilistic and mathematical realities of the former are in stark contrast to the monologues, dialogues and diverse community conversations of the latter and the landscapes they create.

From a primary point of view, secondary qualities are mere appearances, an inferior subjective reality subject to distortion by perception, interest and opinion, a world of semblance rather than substance, fiction instead of much to be preferred fact. This is a reality to be guarded against for, according to Thomas Carlyle,

"Foolish men mistake transitory semblance for eternal fact"

From a secondary point of view, however, perception from within the life-world is all there is. Consciousness creates a world of secondary qualities, intentionality and culture. The belief in primary qualities is just that, a belief, because it is impossible to ever travel outside of human language and experience to an Archimedean point of view. Point of view itself is just a metaphor for

observer involvement and location which are always present even if rigorously standardized and controlled.

On this view objectivity is only a human strategy and an ideal, but it is a powerful strategy that has worked extraordinarily well. The idea has been to describe things in such a way that the description is not peculiarly ours and not peculiarly relative to our personal experience. Earlier in the century the philosopher C. S. Peirce characterized this desirable purity of description as “that which would be arrived at if scientific inquiry lasted long enough,” a process of greater and greater refinement journeying toward what might be thought of as an Archimedean point in time. At that distant time, it would be possible to reach a “final opinion...independent not indeed of thought in general, but all that is arbitrary and individual in thought.”⁵⁹

Belief in an ideal transcendent point in space/time has diminished as the century, philosophy and science have matured. For this reason, The Map of Environmental Quality describes primary qualities from the postmodern perspective as a branch of the truly primary which is secondary.

Primary qualities are either real or strategic, essential or merely useful, fully knowable or asymptotically unreachable, depending on one’s historical perspective and particular allegiance. The possibility that primary qualities might not turn out to be fully “true” from its own point of view is of course a delicious irony. The map shows primary qualities with an evaluative dimension like all the others, in this case the pragmatic view of excellence of fit - not true descriptions of the real world but descriptions of the world that really work.

Secondary qualities are the products of what I’ve described elsewhere as “the human valuing experience.”⁶⁰ These qualities are secondary because they are intimately fused, flavored and colored by human interest. They are built out of belief, purpose, feeling, emotion and desire. As bi-products of environmental intimacy, they fuel the possibility and the reality of intentional landscapes, environments and places.

Tertiary Qualities

Tertiary qualities are global secondary qualities, aggregates that capture the general mood, tone and character of a whole that John Dewey described as “the overall qualitiveness” of a thing, place, occasion...

Some examples: *Second-rate* was the example given about the present day character of Chinese office buildings. It is a long march back to the *splendor* of Marco Polo’s China. A friend writes of his visit to the Parc de La Villette in Paris, “The red follies were visually very *stimulating and fun*, but I found the overall urban park itself to be *cold, industrial and rather bleak*.” I intend that the tone of this piece convey *respect* for the ongoing extraordinary accomplishments of The Reality Project at the same time that I am suggesting that environmental planning and design has a fundamentally different qualitative orientation and focus.

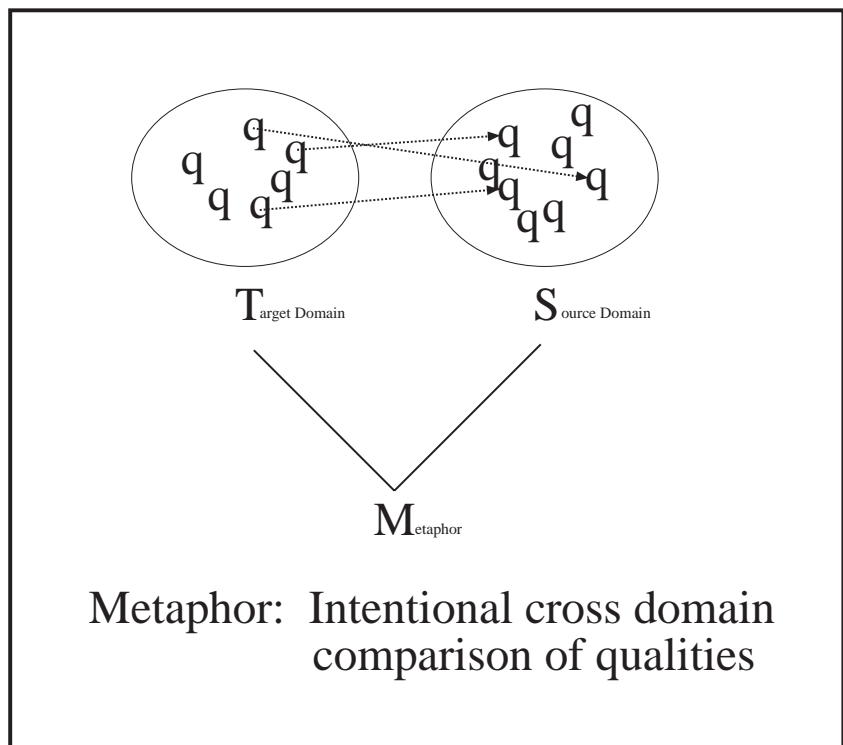
Metaphoric Qualities

Moving on to the lower sectors of the Map of Environmental Quality we come finally to the more explicitly intentional

kinds of qualities, metaphoric and catachresis, and their respective measures.

“Shall I compare thee to a summer’s day?” begins the familiar sonnet as it sets forth on its metaphoric arc from beauty’s season to art’s endurance. From the perspective of a contemporary theory of metaphor it is hard to remember that only a short fifteen years or so ago, the standard theory considered metaphor merely one of the tropes, a Greek word for the various twists and turns of expressive language. Tropes such as metaphor, irony, hyperbole, understatement, sarcasm, oxymoron, and metonymy were categorized as mere rhetorical devices. Their role was to embellish language, adding twists of interest, emphasis, and novelty to plain speech. Metaphor, a focus of fascination since Aristotle, was perhaps the queen of the tropes, but certainly not a central mode of thinking and understanding.

Today, after a decade of cognitive research, *metaphor* is now defined as “**a cross-domain mapping in the conceptual system.**” *Metaphoric expression* is what the word metaphor referred to in the old theory. It’s is narrowly defined as “**a linguistic expression (a word, phrase, or sentence) that is the surface**



realization of cross-domain mapping,⁹⁸ but the mode of realization is not limited to language alone and has broad environmental applications. Nietzsche, who thought that all language was fundamentally metaphorical, turned out to be almost right. The current estimate is around 70%. Statements such as “the cat is on the mat” and “the balloon is up”, well-worn philosophical sentences, are still literally, if simplistically, true.

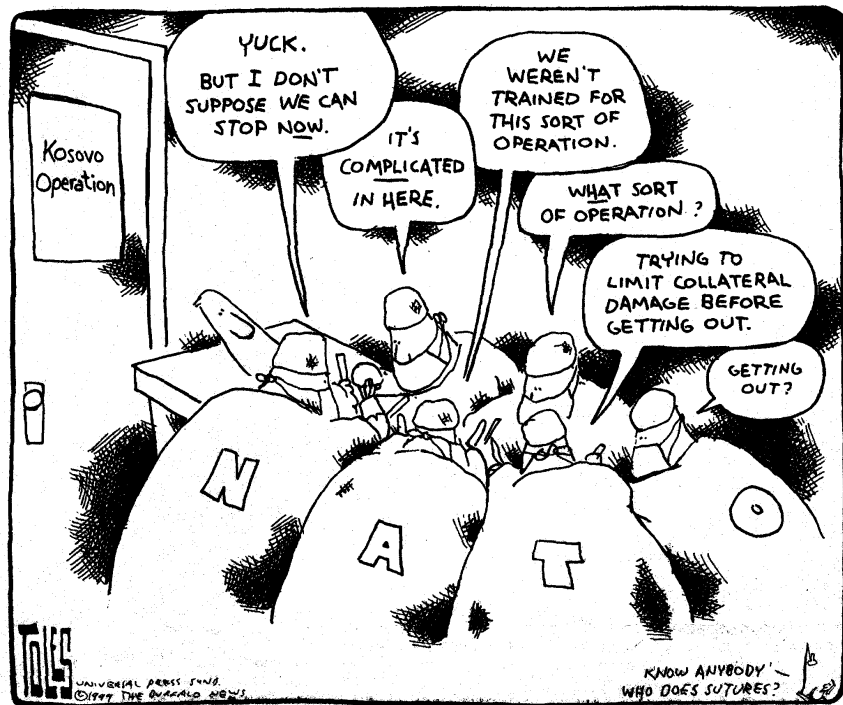
The diagram (p. 9) illustrates what is meant by cross-domain mapping. Qualities in a target domain of interest are selectively paired with qualities in a source domain in order to illuminate some purpose or intent through qualitative comparison.

An example of a metaphoric expression is shown by the political cartoon on the right. Here, the Kosovo military operation (portrayed as the target domain) is being described in terms of the complexity, danger and indeterminacy of operating on the human body (the source domain). This cartoon mapping of exploratory surgery on the Balkan morass connects between two propositional wholes, casting both in a new light. The mapping is of whole to whole but selective part to selective comparable part. It is this pointed selectivity which directs and focuses our attention, tuning the expression. In the culturally well-established mode of the political cartoon we expect to be simultaneously amused, informed, sometimes disturbed and always stimulated by the freshness of metaphorical thought.

The metaphoric qualities of entities in both target and source domains make possible the generation and development of apt and fresh expressions. In the cartoon, the bloody conflict is, like Eliot's famous sunset, “a patient etherized upon a table.” Neither sunset or conflict is actually an open wound but both have the ontological capacity to be such things.

Metaphoric qualities are the ontological characteristics of entities in both target and source domains to join in metaphoric expressions.

With regard to the complexities of



METAPHOR IS CROSS-DOMAIN CONCEPTUAL MAPPING

human thought and metaphorical understanding, philosopher Mark Johnson summarizes his Lakoff, Turner and others recent work:

Contrary to traditional views of meaning, concepts and reason, linguists and psychologists have shown that our conceptual system is, for the most part, structured by systematic metaphorical mappings. In general, we understand more abstract and less well-structured domains (such as our concepts of reason, knowledge, belief) via mappings from more concrete and highly structured domains of experience (such as bodily experience of vision, movement, eating, or manipulating objects). Language and the conceptual system that underlies it, does not give us a literal core of terms capable of mapping directly onto

experience. Instead, it is based on systems of related and interlocking metaphorical mappings that connect one experiential domain to another.⁹

Two basic kinds of metaphor have been identified, conceptual metaphors and image metaphors, both firmly grounded in images of human experience. The difference, according to Lakoff,¹⁰ is that while conceptual metaphors often link many elements between conceptual domains, image metaphors are more of a “one-on-one” between two images. To illustrate his point he gives the example of the following Indian poem:

**Now women-rivers
belted with silver fish
move unhurried as women in
love
at dawn after a night with
their lovers**

(Merwin & Masson, 1981, p.71)

Metaphors, they believe, make it possible to map complex propositional

structures - that quite typically involve metaphorically characterized concepts of time, purposes, causes, categories, states, changes, scales, feelings, and all manner of qualities - and to overlay map on map and image upon image. And if propositional reasoning is grounded in image-schematic structures, it may be, as Lakoff speculates, that...

Abstract reasoning is a special case of image-based reasoning. Image-based reasoning is fundamental and abstract based reasoning is image-based reasoning under metaphorical projections to abstract domains¹¹.

The remarkable qualities of metaphor

enter powerfully into design thinking in all phases of designing and play a critical role in the creation of settings for environmental experience. In environmental problem formation, the conscious employment of metaphor generates needed multiple angles of vision on important issues. Donald A. Schön, a planning theorist from MIT, characterized this use of metaphor as “frames of reference” in his writings in the late 70s. In his essay “Generative metaphor: A perspective on problem-setting in social policy,” he emphasizes the situational nature of environmental problems and recommends the use of problem-setting narratives, explanatory stories, diagnostic/prescriptive stories and generative metaphor as strategic tools. “...all problem-setting stories,” he writes, “have frames which enable their authors to select out features for attention...When we

“Metaphors are quality pumps.”

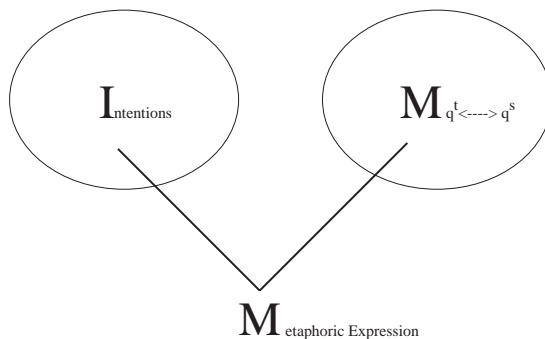
George Lakoff

become attentive to the framing of social problems, we thereby become aware of conflicting frames¹². It makes a difference, for example whether one sees “squatter settlements as debris, crime... or as legitimate initiative.”

Environmental design problems can not be considered given. They are socially constructed evaluations of the situational conditions in places ripe for change. And when such problems are understood as evaluative processes and constructions, attention naturally turns to the ways of thinking that help build the understandings that serve as springboards for change. The use of metaphoric seeing (situations) as..., as explored by Schön and others, adds multiple points of view to a complex social process and leads to a greater richness in conceptions about what needs doing.

Narratives about places, stories woven out of what they mean and what they are about, is one way to provide a realization of metaphoric thought, but there are many more. Models for designers, such as my own Designer PIE: Ways of Thinking About Design¹³, consciously collect, model and attempt to expand the use of such designer tools.

Designing is at root a process of evaluating, comparing, importing, expressing and interpreting intimate qualities. In addition to enriching the thinking that goes into the construction of environmental design problems, metaphor appears to be everywhere involved in considerations of environmental quality. Conceptually, metaphors function as quality pumps, drawing qualities from source domains for qualitative comparisons and enable larger aggregate comparisons between what exists and what is wanted, between what one has, has experienced and can imagine, and between the relative ability of qualitative compositions to satisfy human needs. Cross domain comparisons make it possible to articulate complex feelings about quality. Linking one thing with



Metaphoric Expression:

Mode of realization of intentional cross-domain mapping:

words: speech, writing, calligraphy
 words & word images, e.g. poems
 words & images, e.g. political cartoons
 drawings, paintings, sculpture
 music, dance
 drama, opera, film
 ritual & other
 social institutions, e.g. rites of passage

places at all scales

plans: frameworks for place transformation

another builds fresh contexts for thought and meaning.

Metaphors also pump qualities toward metaphoric expressions which range in type and complexity as shown in the diagram on p.

11. The political cartoon is only one example of the way that metaphoric expressions - an image in this case rather than a word, phrase or sentence - reify (make real) cross-domain relationships.

Other **experiential realizations** identified in the new research include: literary works; rituals; dreams; myths; physical symptoms; social

institutions; social practices; laws; foreign policy; and forms of discourse. To this long and impressive list I've explicitly added places. Places can be usefully thought of as metaphoric expressions, *experiential realizations of the cross-domain mapping of intentions and configurations*. Here below is the general model for places:

Pumping qualities into physical and spatial expressions is easily recognized as a commonplace in design as in wanting a space to have a soaring cathedral-like feeling or a garden to have the riotous color and texture of a Gertrude Jekyll border. We'd like our downtown to have as elegant an open space system as Oglethorpe's Savannah; the local restoration project to look and function as it was before human existence or the way it was in 1895; the water in our rivers to be swimmable and fishable; the new public building to be more memorable than cheap.

Intentional structures are the value-based frameworks that create agreements about "what needs doing" into directional commitment and strategies for environmental change. I call this intentional structuring and directional commitment "intending toward..." the ellipsis suggesting an omission and a reaching toward

completion. The preceding phase of metaphorically filtered problem construction I call "attending to..." as a way of focusing on the purposeful widening of areas of aboutness needed to get beyond

material form and pattern. Pumping intended qualities into physical and spatial realizations requires a transformation heavily dependent on the ontological capacities of "things," i.e. on the ability of

material qualities to be metaphorically expressive. But even more importantly, it is the ability of material "things" to be so configured as to be multiply, simultaneously, metaphorically expressive. A hedge row, for example, *is* (can be seen as...) a barrier, a fence, a field's end, a drainage; and if it is wide enough and diverse enough it is a

habitat, a seasonal delight and a place to walk; and if it is planted properly it is a woodlot, a pharmacy, a florist's, a nursery, a fruit stand; and if it is an extensive pattern enough across a landscape, it is the cultural story and structure of a place and so on.

The point is that **a particular expressive configuration has the ontological capacity to gather many intentions, to integrate many concerns, to capture and convey many qualities, to hold a multitude of meanings, to be many "things."**

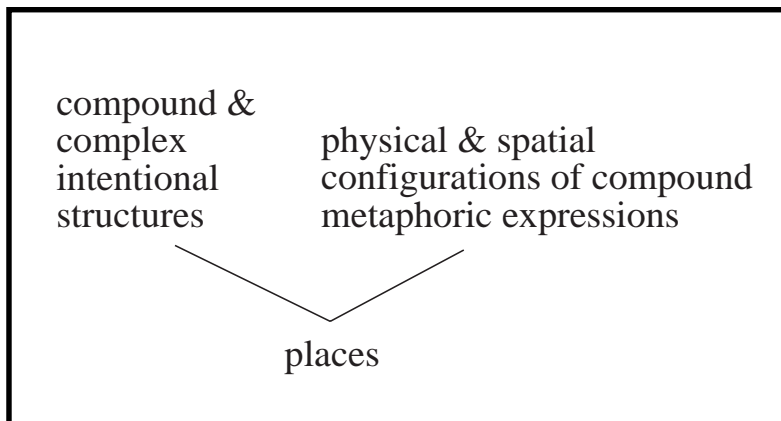
Another example is the labyrinth shown above that was chalked on the

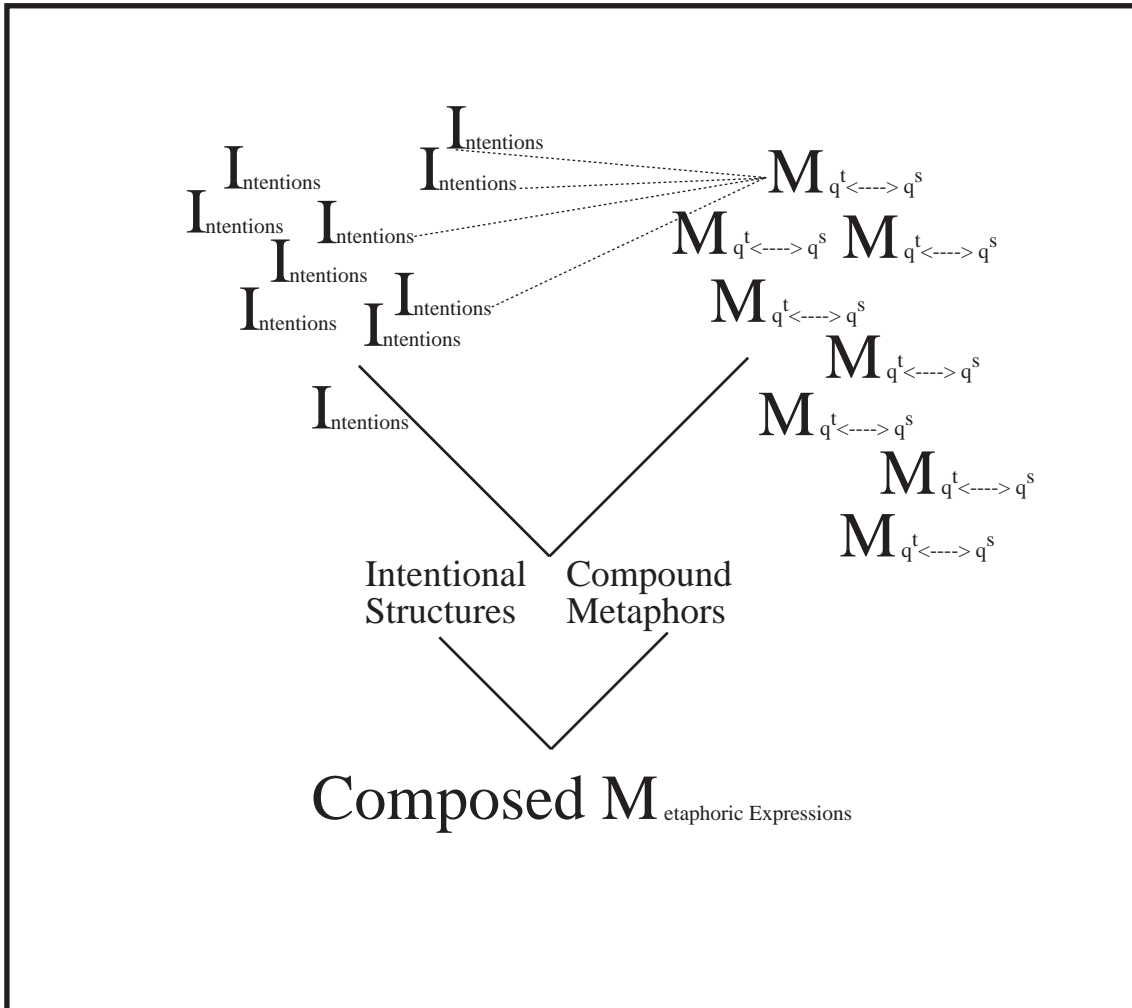
Circle of Spirituality



mechanistic, overly simplistic notions of non-intimate problem solving. The new terms, attending to... and intending toward..., along with their counterparts, forming out of... and meaning in experience, name important phases in designing that are alive with metaphoric qualities and cross-domain activity.

If attending to... is the social construction of a "ball" and intending toward... is the throwing of the "ball," forming out of... is the catching of it - but it is never a "ball" that is caught. **This is the enduring mystery of design, how what is "caught" can actually, aptly and movingly express what was intended in**





grounds of the First United Methodist Church in Hermiston, Washington¹⁴. Here, a spiritual journey is realized as an actual labyrinth, based on a floor pattern in Chartres cathedral. Walking the labyrinth is walking along a spiritual path with all its twists, wrong-turns, confusion and, one hopes at some point, enlightenment. The physical pattern is the spiritual path.

The target domain of intentions, then, constructed out of many perspectives and full of situational interests, concerns, hopes and feelings, will have metaphorically dense and metaphorically complex linkages as illustrated above.

This diagram portrays an organizing field of intentions related to an organizing field of metaphoric expressions. The lines between one group of intentions and one particularly well-composed and finely-tuned metaphoric expression portray the ability of one apt expression to gather

many intentions as in the example of the hedge row.

If intentional structures are complex and lead to many possible metaphoric expressions, it follows that the composition of such higher order metaphoric expressions as places will require a better understanding of the ways that metaphoric interweaving can lead to significant, satisfying and successful catachresic expressions.

The development of cross-domain relationships in metaphors of higher order complexity such as places is an unfolding, heuristic discovery process. To the political cartoonist, it took just the right number of doctors, each emphasizing key cross-domain connections, grouped in just the right way around the “patient” to get the expression just right.

The ontological potentials of physical objects, relationships, images and patterns can in themselves suggest

intentional possibilities spurring reconsideration and fresh thinking about what is wanted and what needs doing. Intentional structures are not fixed programs.

In the back and forth of cross-domain work called designing places, intentions can be chosen, structured and mapped thematically - in physical and spatial terms - as multiple overlays in the source domain. Source domain configurations with the capability to reify multiple target interests become especially useful, and these in turn influence target domain intentions because of their latent metaphorical qualities.

“Experiential bases and realizations,” according to Lakoff,

“ are two sides of the same coin: they are both correlations in real experience that have the same structure as

the correlations in metaphors.¹⁵

Metaphors provide a language of projection from what we think and feel we have to what we want to have to what we get. In the reverse sense, they also provide a common basis for how we respond to, re-cognize and interpret what we got. I discuss this “reverse use” in the section on meaningfulness in excellence of catachresic expression. Both target and source domain ontological capacities for seeing as... and mapping as... build up a wealth of relevant connections awaiting higher level correspondence, integration, composition and evaluation.

Catachresic Qualities

My purpose here is to build a vocabulary for designers that allows us to speak about composing compound metaphorical expressions in the design of places. I want there to be a term that is understood to mean the intentional, creative composing and skillful integration of metaphorical expressions in order to achieve designed richness and complexity.

Catachresis appears to be an apt choice. Its present polysemous personal-ity has three quite distinct but somewhat related and relevant meanings. The first is literally the mixing of metaphor, something we have all been taught to avoid, and the term is usually coupled with disapproval.

A second meaning of the term comes from its use in the development and articulation of scientific theory. Here catachresis means to introduce theoretical terminology where none has previously existed - exactly my intention¹⁶.

Thirdly, catachrestic usage in language is also “the improper use of a word or phrase, especially in application to something it does not denote.” On a more positive note it can also mean a deliberately paradoxical figure of speech.

Catachresis in design is a semantic response to all three of these meanings.

First of all, and most importantly, it refers to the intentional composition and integration of a significant set of metaphorical expressions in physical, spatial and relational form - *good metaphorical*

mixing as opposed to the bad metaphorical mixing in language that is considered fuzzy-headed and confusing.

To help distinguish the new and highly desirable catachresis in design from its old and undesirable use in language requires the filling of yet another theoretical void. Here the proposed new adjective form, catachresic, a positive description of compound metaphorical qualities, replaces the existing catachrestic with its generally negative baggage. Catachresic qualities are not, by definition, catachrestic.

Catachresic qualities, then, are compound compositions of metaphorical qualities in the source domain of places that physically and spatially “re-present” their cross-domain intentions.

With respect to the third existing sense of the term, catachresic qualities name what they do not literally denote because they are metaphorical qualities whose denotations are not literal but imaginative projections grounded in and built upon common metaphorical experience. They can be quite paradoxical, as when for example, the rounded surface of the hardest stone simultaneously expresses softness and the immutability of art.

Places are poems, I can now say metaphorically with some understanding and anticipation of important cross-domain linkage, but they are poems in a spatial way. The kind of mental play the ear hears in special/spatial typifies the cross-domain character of both poetic and design composition and configuration. In places, spatial relationships are special and meaningful components of metaphorical expression. Punning, as someone has cleverly noted, is target (domain) practice for designers.

But places like poems are catachresic; they are compound metaphorical expressions, interwoven with metaphorical density and cross-domain complexity. Like poems they strike us simultaneously on many levels and elude a single or simple interpretation. Like poems they are also full of what we bring to them.

Shakespeare’s Sonnet No. 60 provides an exemplary display of the metaphoric mind at work. Here is a 400 year-old precedent and classic guide to the catachresic phenomenon that every designer willing to endure 500 year old English can profit from. The second quatrain of its typical 4-4-4-2 Shakespearean structure reads:

**Nativity, once in the main of light,
Crawls to maturity, where-with being crowned,
Crooked eclipses ‘gainst his glory fight,
And Time that gave doth now his gift confound.**

Helen Vendler, in her *The Art of Shakespeare’s Sonnets*, asks us to note the “...always unsettling way Shakespeare places only a very permeable membrane between the compartments holding his separate languages - [These include] pictorial description, philosophical analysis, emblematic application, erotic pleading - and lets words “leak” from one compartment to the other in each direction.¹⁷”

The effect is not catachrestically disruptive, she believes, but “an almost unnoticed rejuvenation... and an unexampled fluidity...” Multiple domains are drawn together and meet to make a larger whole.

The poet “behaves as though the discourses of astrology, seamanship, astronomy, child development, political theory, deformity, religion, and warfare were (or could be) one.”

A lesser poet, Vendler speculates, following the “inertial tendency for language to stay within the discourse category into which it has first launched itself,” might have written:

**Man, once born onto the earth,
Crawls to maturity, but at**

**that very moment falls,
Finding his strength failing
him**

Her point is that Shakespeare, “grandly and magisterially” exploits the furrowed nature of thought, by creating new intersecting lines between diverse fields that yield unexpected harvests of experience. Shakespeare’s twists and turns of imaginative, interactive plowing mirror the way his mind purposefully shifts and blends the multiple “angles of vision” it keeps simultaneously in play. It is this resonating, interwoven whole of multi-angled attention, the way that shifts in discourse mirror a shifting mind, and the leaking, mixing and blending of metaphoric qualities that creates the catachresic composition.

Vendler believes that,

**The proffering and hierarchizing of several conceptual models at once is...
Shakespeare’s main intellectual and poetic achievement in the Sonnets.**

But it is not just the poet’s ability to manage and blend many conceptual models at once that guarantees his poetic success. It is also and especially the way the compound linguistic models are able to re-present the range and variety of emotional tonalities (tertiary qualities) in the Sonnets. These connect an unusual emotional and philosophical breadth of aboutness (an aboutness we still respond to 500 years later) to their compound and deeply integrated metaphoric expressions.

The Sonnets live today because an enormously skillful poet did not oversimplify the thick forest of human experience (“Just get one big concept.”) or rationalize away the central reality of conscious life (“Just be objective. Don’t use or mix your metaphors. Things that you can’t count, don’t count.”) the way that too many policy and place makers have done in the modern period.

Catachresis is the goal not the problem. It is critical for designers to attend to a wide range of human normative and valuing dimensions in the target range of places. Rich places like rich

poems require more than a limited aboutness. I believe that significance, satisfaction and success in the planning and design of environmental expressions is profoundly related to a broad-banded aboutness and to the skill, complexity and density of its metaphoric composition and source domain expression.

Shakespeare, with the virtuosity of a modern graphic equalizer, blended his multiple layers of discourse into one choral human whole. The Sonnets are a Sistine ceiling of the catachresic qualities he produced. Like places, they are made out of sets of compound metaphoric expressions, compositionally prepared and packaged so that we might come face to face with who we are.

Excellence of Metaphoric Expression

Meaning is the measure of excellence in metaphoric expression, just as meaningfulness is the measure of the more compound variety found in catachresic expression. Excellence occurs when metaphoric expressions mean well and in environments, landscapes and places when they achieve, or at least approach, a Shakespearean symbolic resonance. But I am not referring here to semantic meaning even as I strive to maintain it for clarity of explanation. People experience the places of their lives in ways that they term meaningful that seem to precede and transcend a language-based, and especially a literal language-based, signification. How might we think about this further?

It seems likely to me that meaning, like truth and quality, will behave polysemously, and that we ought to expect important semantic differences between the primary and secondary quality points of view. This is certainly the case with contemporary discussions of truth. One to one correspondence with objective reality in the primary realm becomes something else again when immersed in the secondary quality world of experience.

Truthful descriptions are descriptions that work - to repeat my earlier paraphrase of Richard Rorty. And then there is Rorty’s somewhat more surprising

assertion, “Truth is the statement of a goal.” This begins to make sense when it is better understood from Rorty’s pragmatic perspective. This is the truth of a non-transcendent intentional consciousness, immersed in language and culture. From this insiders point of view - and home of secondary qualities - it makes perfect sense to talk about normative truth or the truth of valuing, and of a person and their actions being true to their beliefs, interests, concerns and commitments.

Meaning in this realm, I suspect, must also have something to do with how human consciousness is conceived and how and where we believe this self-awareness is located in the world. There is considerable philosophical agreement, as John Haugeland points out¹⁸, that human consciousness is intrinsically intentional and normative. The most favored locational strategy seems to be the same relational holism one finds in the model of secondary qualities. I described this earlier as the fusion of interest and the object of that interest and also as the wholeness of an environmental phenomenon and the organ of its interpretation, as in color.

Relational wholeness, however, doesn’t go far enough for Haugeland because it still carries over, if only implicitly, the mind-body distinctions that lead to such things as primary qualities. He hypothesizes instead an environmentally embedded and embodied intelligence. This is a conception of mind embedded in the world, similar to earlier suggestions by Gregory Bateson and very compatible with the more recent discussions of fundamental inness in environment by Arnold Berleant¹⁹. His term for this deeper relationship than the simply relational is “intimacy,” a term I also use to distinguish the primary from the other qualities.

My concept for this intimate embedding and embodiment of mind in environment is *environmental valuing* as developed in “*Designing in an Environmental Field: Essays, Metaphors, Kasinas*.” Here I wrote about valuing as a relational whole of awareness that we are *in*, as *in* the intimacy of secondary qualities, with this valuing awareness intimately embedded within and in

process with environment.

It has been a personal struggle to adequately conceptualize and convey this inness, and it is therefore an especial delight to find more able philosophers, such as John Haugeland and Arnold Berleant, taking it on. I think Haugeland's right when he says that part of the problem is that Descartes did such a good job of influencing Western thought. Others have also pointed out the way that the fundamental subject-object structure of language works against the intimacy project. A third, and for me the most critical obstacle, is an absence of any real acknowledgment that environmental position - and the quality of this relationship - is such a central issue for design theory and criticism. Environmental valuing has been my stake in the ground attempt to talk about the embedded intimacy of an intentional and normative consciousness. It is also the basis of an environmental conception of meaning I call *meaning in experience*.

I've stopped counting the times I've seen the terms value and meaning, as in the value and meaning of something, used together as though they covered some territory not fully covered without both concepts. There is clearly something more to this coupling than the redundancy of importance followed by significance. In environmental valuing I conceive the value/meaning relationship in a manner metaphorically similar to Bucky Fuller's reminder that tension and compression always coexist (tension/compression). Value and meaning always coexist, but I prefer to say that *valuing* and meaning always coexist (valuing/meaning), using the more active form, because valuing is an ongoing process and not a thing.

Valuing pointedly describes the flame of conscious intentionality, its passions, interests, beliefs, concerns, hopes and desires, and its content includes the complexity of kinds, mixes, priorities, contradictions and paradoxes of these powerful drivers.

Valuing in places is normative in the sense that there is social pressure to conform to expected standards of aboutness, local customs, cultural traditions and technologies of expression. But environmental valuing suggests a creative tension between the normative and the new that causes old interests to be reassessed, allowing new awareness, new interests and fresh expressions to evolve.

Meaning in the most general environmental sense at first acknowledges, then takes the measure and the temperature of the significance of an embedded valuing process. Another way of saying this is that interests are intrinsically meaningful. They have meaning in human consciousness simply by virtue of their existence. Expressed simultaneously: interests/matter and similarly beliefs, concerns and desires/matter. Beyond being a flip-side indicator, meaning would then seem to be an ongoing reflection on the state of the

Knowledge

Knowledge as modeled by Aristotle in Book VI of *The Ethics*:
He identifies 5 kinds in two groups:

Group 1: knowing for the sake of knowing (the speculative intellectual virtues)

<u>nous</u> :	understanding or insight
<u>epistémé</u> :	in Latin, Scientia
<u>sophia</u> :	speculative or philosophical wisdom

Group 2: knowing for the sake of action (the practical intellectual virtues)

<u>praxis</u> :	doing, moral or political conduct
<u>poiesis</u> :	creating, making or performing

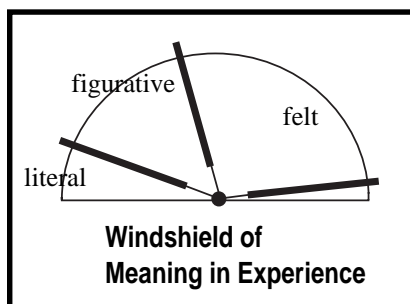
With regard to the Arts, Aristotle distinguishes between the liberal and the servile arts (a word with unpleasant connotations to our ears that were not intended). The distinction is ontological not social and is a dividing between the immaterial and the material.

servile/material: the art of the farmer, the physician, the sculptor, the shipwright, where the artists work with physical materials. "A work of art of transformed matter can exist at only one place in the cosmos. It has an unique or singular physical existence." M. Adler

liberal/nonmaterial: the art of working with symbols rather than materials. The teacher, the poet, the writer, the mathematician, the musician...

valuing process, an evaluative dimension of environmental self-awareness whose manifestation depends on the realms, intensities and phases of intentional activity.

A vast region and perhaps the matrix of human intentionality is emotional, and so it is to be expected that the meaning measures of such content are emotional as well. Consider again the full measure of love, pleasure, beauty, joy, sorrow and regret that is captured in the Sonnets. A semantic, literal accounting of such content is not meaningless but can't help falling short of the mark²⁰, (as in the near impossibility of responding at times to, "Just tell me what's the matter."). It is



no accident that there has been a traditional turning to metaphor to represent the emotional richness and resonance of felt-life.

In the metaphoric windshield above, the full swipe of meaning in experience arcs from the literal to the figurative to the felt. A short swipe in the range of the literal doesn't clear things up very much. It may well be that the order is backward and that a full swipe, originating in felt-meaning, may eventually make it from felt to figurative to literal.

These well-intentioned metaphorical expressions are partially useful in describing the concept of meaning as a broader realm of experience, but they are both too linear and sequential, based on what we now know about the simultaneity of mental process. A better image might be a windshield with nested wipers, each covering its own area, all working at once. Or, if meaning is a kind of measure, perhaps a set of nested meters simultaneously monitoring the differing kinds and qualities of environmental response. Or...and it becomes more and more obvious that the complexity of the mental

process will require a more evolved and perhaps compound expression.

The proof of excellence in metaphorical expressions is not after all a matter of whether they are well-meaning but that they mean well.

Excellence of Catachresic Expression

Meaningfulness is the measure of excellence in catachresic expressions. Because of their abundant aboutness, compound metaphoric expressions are by definition full of meaning of many kinds on many levels.

Kinds refers to the generic spectrum of felt, figurative and literal. There are the modes of *that* something means, *how* it means and *what* it means. There are the generic state-of-the-system taking measures of importance, significance, seriousness, satisfaction and success. There are the kinds that are more directly related to the specific valuing and normative interests embedded in any environmental field.

Levels has more to do with the valuing point of view, our angles of experience, as in: from an aesthetic perspective, or from an economic point of view. Point of view has other cultural dimensions as well as in: meaningful to me; to us; to them; in our region; in our religion; in our society; to a person of my age; sex or gender; to a person with physical disabilities; to the rich; the poor; to an teacher, soldier, grocer, student; to a person of my experience. Level in meaningfulness can also refer to the scale of consideration as in: parts; ensembles of parts; and complex wholes.

Meaningfulness, however, doesn't just refer to a life-reflecting abundance transformed into an excellence of making. It must also refer to a perceived meaningfulness of communication in experience.

How do complex metaphoric expressions communicate? How do they mean well? Does what get put into the original expression match what is taken out?

First of all, modern communication theory underscores the importance of

**“The question is,’ said Alice, ‘whether you can make words mean so many different things’”
(Lewis Carroll)**

discarding the conduit metaphor of communication. Meaning isn't a something that can be put in; it isn't a something that can be transmitted or taken out. Meaningfulness doesn't mean buckets full of meaning that can be passed from makers to receivers. Since the conduit metaphor is so deeply a product of our language and habits of mind, it is especially difficult to overcome. It seems so natural to treat meaning as a substance or a thing because that is the way we talk about it. Communication theory tells us that nothing is sent because there is nothing to send. On this view, words don't have “insides,” one can't *get something out* of reading a sentence, and there is no knowledge *in* the books in the library. It will not do for me to say that I'm making an effort to *capture* these thoughts and get them *across* better²¹.

What we have is our separate and social repertoires of thoughts, feelings, perceptions and experiences. These are made manifest and reified as marks on paper, as paint on canvas, as sound, as movement and gesture, as the composition and configuration of places, and by means of all the human modes that symbolic activity may be embodied in environment.

Communication takes place through re-cognition and reconstruction where there is an adequate commonality of repertoire. Notes on paper, for example, are not music to someone who has never learned to “hear” a score.

Since there are no exact duplicates of repertoire, partial communication is the norm. Differences of magnitude in repertoires such as accompany the

“No, I think the question is,’ said the moth, ‘whether you can make so much meaning using only words.’”

differences of language, location, time and culture increase the difficulty of communicating thoroughly and well. Good communication therefore takes insight, strategy, skill and effort.

Our time is not the time of Shakespeare's England; our cosmology, language and politics is not Elizabethan. The metaphoric expressions of our own time are less likely to be drawn out of the distant source domains of Shakespeare's experience. But we do share a common enough repertoire of cultural origin, human hopes, feelings and relations that make it possible for us to reach back imaginatively to their origins in the lives of others and reconstruct a meaningful response.

My reading of a poem is not your reading of a poem: your experience of a place will not be mine. The original intentions of an author or designer or a people will not be fully recoverable in the experience that others have of them. The result is not however a radical subjectivism in the solipsistic sense. Because our interpretations are not exactly the same does not mean that they have nothing in common and will never recognize or share anything in common. A long record of successful and satisfying communication springing from a myriad of symbolic forms suggests otherwise. Meaningfulness as a re-cognition turns out to be a social process that requires the expenditure of energy and effort to build convergence in the commonalities of the repertoires we share as valuing social beings embedded in environment.

Not thinking about meaning in conduit terms or as a substance requires thinking about it in some other way. My proposal that it be understood as a naturally occurring and ongoing reflection on the content and state of our consciousness is an attempt to reframe the concept in terms that provide a better fit with communication theory.

If all valuing interests are intrinsically meaningful and all compound metaphorical compositions are intentionally meaningful because they are composed out of things that matter, meaning as a separate substance, a ball that we had thought we had to catch, has evanesced.

In environmental valuing intention is said to be metaphorically embodied in

environment. It can not be a coding or a multiple coding, because metaphoric expressions are not messages or codes. Following information theory, communication of these patterns must be closer to a mind to medium to mind induction. It is as though environmentally embodied patterns of intention carried and cast their meaningfulness like shadows. It is as though convergence of understanding were able to grow out of the shared remembrances of experience in that shade.

Excellence of catachresic expression then requires both a meaningfulness of intentional expression and the meaningfulness of a social reconstruction.

Two Different Projects

The Quality Project like The Reality Project has its signature kind of quality. I have characterized the qualitative center of the former as intimate and the latter as remote and detached. There is no attempt to claim that one is more important than the other, just that it is critical to note the important differences. Quite different kinds of work, uniquely different projects, and differing views on reality grow out of the location of attentional centers within the concept of quality.

Each project cannot help but view the other from its own point of view, from within its own conceptual system; each has its own primary concepts and vocabulary. In the Martin Scorsese film "Kundun," Mao Tse-tung tells Kundun, the Dalai Lama, that Tibetan Buddhism has poisoned the mind of his culture and made it weak. The audience is left to construct the parallel understanding that a far less compassionate Chinese Marxist-Leninism has done its own poisoning and constructed its own version of reality. The larger implication, of course, is that there is no point of view that is not ideologically stained, no description of reality that is not a form of propaganda. This is one of the disturbing and upsetting insights of postmodernism. The Quality Project shares all the prospects, problems and

paradoxes of this postmodern perspective.

On this view intimacy is a moving experience. It involves the moving of the mind more deeply into environment and calls for new ways to think, talk about and negotiate the closer relationship. John Haugeland, Arnold Berleant, Hilary Putnam and I all offer some possibilities but the project is in its infancy.

Haugeland's intimacy concept redirects philosophical attention to the embedded intentionality and normativity of human consciousness and the role that "the intentional stance" (Dennett) plays in an unfolding reality of experience. This greater focus on the environmentally figural powers of intentionality leads inevitably to such strategies as valuing in order to better conceptualize the full formative content of a valuing mind. The human valuing experience, intimate in environment, is far more than the rational mind of modernism.

Intimate concepts such as environmental valuing portray the embedded nature of human valuing as a mentally alive environmental setting from which environmental problems arise, are socially constructed and lead to new transformative cycles of value embodiment and expression.

I have claimed that an intimate orientation inevitably leads to the reframing of such familiar Reality Project terms as Truth, Meaning and Knowledge. Standing back and incrementally developing an understanding of our first nature is the principal goal of The Reality Project. This is a truly great project whose latest accomplishments - determining the age of the universe; sequencing the DNA of the human genome; stem-cell regrowth of human cells and parts - all leave us wondering, what next? The shadow of human hubris, however, lingers close nearby.

Standing in, perceiving, reevaluating and re-configuring an environmentally intimate and evolving second nature is the overall goal of The Quality Project. This project is perhaps even more vital. The inability to dwell respectfully and sustainably would bring both projects to a close. It stands to reason that the correspondence truths of the former are not the intra and cross-cultural truths of the latter, as for example the truth of the Chinese need

to save Tibet from itself. The inability to distinguish valuing truths from empirical truths has a long historic trail of tears and human tragedy. Compassion, not a primary quality, is as good a place as any to begin.

Intimacy changes The Reality Project emphasis on, and unquenchable desire for, unambiguous semantic meaning to a broader more inclusive meaningfulness I've called meaning in experience. Semantic meaning is not slighted in this conception. It is still the central arbiter of literal, direct, precise communication in language, but it becomes far less central in the meaning of metaphorical expressions, especially those that are not so predominantly linguistic, such as the intentional places of environmental planning and design.

Knowledge in The Quality Project is not a complete change from what Aristotle called *epistémé* (L = *sciencia*) to *praxis* and *poiesis*, but it is certainly an intended reversal of emphasis of kind. There is no agenda for dethroning knowledge from the *discovery of the true objective reality* of a first nature - the world as it "really is" - and recrowning it as *the making of true realities* of a second nature - the created world as it is intended and experienced.

The Quality Project orientation just holds that The Reality Project knowledge of discovery is a part of its world and not the other way around. It is not necessary to *believe* in primary qualities and a strong objective reality in the 17th century sense in order to admire the strategy and enjoy all the accumulating accomplishments of empirical science. The projects are not mutually exclusive. It will not be possible to realize qualitative ends without good empirical support.

The view is, however, that there are many kinds of knowledge just as there are many kinds of quality and that the knowledge of making and doing and sustainable dwelling is important enough to have its own project, its own vocabulary, its own concept of research and its own research agenda.

The research agenda of The Quality Project is primarily theoretical and philosophical at this stage because it is a young project. Like mathematics, it requires little more than a blackboard and a wastebasket. But it is even more

economical than math, as the old joke goes about philosophy, because it hasn't any use for the wastebasket.

Its debt to such things as the recent philosophical rediscovery of consciousness is patent. We are only a few short years past the period of total denial by paleo-behaviorists like B. F. Skinner and "just the facts" positivism that such a thing as consciousness exists. Not being directly approachable by primary quality methods has long been one of the primary reasons for ignoring what is right before our eyes. But all this is changing, and there is renewed interest in what I have been calling the valuing mind. The recent writings on the intentionality and normativity of consciousness by Dennett, Hauge-land, McDowell and others have too many environmental consequences to ignore.

Trying to explain how it is that highly organized organic material is able to generate what we experience as a field of self-awareness is a worthy focus for The Reality Project of the 21st century. Working out of the implications of locating, embedding, and embodying that intelligence in environment, a project begun by the late Gregory Bateson, is a priority task that is rapidly gathering minds and momentum. A new philosophy, built around intimate qualities, is in the making.

A second and equally important debt is owed to the most recent developments on metaphor in philosophy, linguistics and cognitive science. What was commonly thought about metaphor ten years ago is not what we think today. Metaphors are incredible quality pumps, as George Lakoff reminds us, with one hand on the handle.

The ontological capacity for things to be "seen as" and "mapped as" is not just a Reality Project annoyance. Metaphoric and catachresic qualities are the building blocks of environmental reality and excellence, not frills to be added to the facts. The idea that we may be able to explain a significant portion of the embedding and embodiment of valuing in environment as compound metaphoric expressions needs much more development. New ways of designing and the teaching of design must be close behind.

The search for a widened concept of meaning suitable for reflecting on the larger range of experience included in The

Quality Project begins with a recognition of the limitations and inadequacy of the concept's present use. Courageous first steps into new territory will not receive ready and eager acceptance because Reality Project linguistic hegemony is so firmly entrenched. Religious and patriotic semanticists and all those manning the barricades of tradition against the charge of difference can be expected to continue to subvert any postmodern Resistance.

But the time has come to fearlessly pursue the implications of communication theory for environmental meaning and move beyond the conduit metaphor for communication. New metaphors, such as Reddy's classic "Toolmakers Paradigm,"²² need apply.

Perhaps it will prove useful, if only for awhile, to think of meaning as meaningfulness, as the constant measure of our intentional states, no longer a substance but the simultaneous and inseparable companion of an intentional consciousness, like kinds/measures, like description/evaluation, always co-present like the reflecting backside of an intentional moon.

The Quality Project is a big tent project. It welcomes all active players, the conceptually dissatisfied, all who share its interests, the value embodyers and embedders, the simply curious, and seeks new converts to its point of view. Its intent is the widest possible audience participation in the creation of environmental quality. All the environmental planning and design professions and related thinkers, tinkers and makers have reserved tickets to the show. Metaphorically and polysemously speaking of course, there are still high-quality seats onstage and at the front.

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Notes

1. Excerpt from the Eugene Register Guard, April 7, 1999.
2. From p. 133 of *Truth and Progress*.
3. After an original image by Seymour Papert quoted in "Generative Metaphor and Social Policy," p. 163
4. From Hilary Putnam's *Reality with a Human Face* quoted in *Truth and Progress*, p. 28.
5. Bernard Williams from a quote in *A Critical Review of Berkeley's Idealism*, p. 82.
6. In *Designing in an Environmental Field* I describe human intentionality as a valuing experience, not one that we have, but one that we are environmentally embedded in.
7. Sonnet 18. p. 119 in *The Art of Shakespeare's Sonnets*.
8. George Lakoff in "The Contemporary Theory of Metaphor," p. 203. "The classical view of metaphor," he tells us, "is that metaphor is a matter of language not thought." But he finds that: "In short, the locus of metaphor is not in language at all, but in the way we conceptualize one mental domain in terms of another." And on p. 208, "The metaphor is not just a matter of language, but of thought and reason. The language is secondary."
9. Mark Johnson in *Moral Imagination*, p. 10.
10. George Lakoff in "The Contemporary Theory of Metaphor," p. 229.
11. *ibid.* p. 229
12. Donald A. Schön in "Generative metaphor: A perspective on problem-setting in social policy," p. 139
13. Designer PiE: Ways of Thinking About Design is a Macintosh software model for designers developed for LA 490 & LA 499, Comprehensive Project Preparation and Comprehensive Project at the University of Oregon. A new web version, Designer PiE2K: Ways of Thinking About Design, will be available in fall 1999 at: <http://darkwing.uoregon.edu/~diethelm>
Designer tools included are: The Nine Questions (that always have to be asked); Fan of Values, Fan of Intentions; N³: Narrative, Naming and Numbers; Vivid Presence; From Here To There; Field & Focus; Metaphor, Prototype and Archetype; Intimacy: People & Place; Sine Qua Non; Issues & Inertia; and Image/Place.
14. Circle of Spirituality from "Labyrinths send believers down spiritual paths," Tri-City Herald, April, 16, 1999.
15. "The Contemporary Theory of Metaphor," p. 244 which continues: "The difference is that experiential bases precede, ground, and make sense of, via the conventional metaphoric mappings, *wherese realizations follow* and are made sense, via the conventional metaphors... one generation's realizations of a metaphor can become part of the next generation's experiential basis for that metaphor." (emphasis added)
16. "...catachresis (using an idiom to fill a gap in the lexicon). Max Black in "More About Metaphor," p. 25 in *Metaphor and Thought*. Also from the same collection: "There exists an important class of metaphors which play a role in the development and articulation of theories... Their function is a sort of catachresis - that is, they are used to introduce theoretical terminology where none previously existed." Richard Boyd in "Metaphor and theory change: What is 'metaphor' a metaphor for," p.482.
17. Helen Vendler in the "Introduction" to *The Art of Shakespeare's Sonnets*, p. 34-35.
18. From John Haugland's discussion of *intimacy* in "Mind Embodied and Embedded," in *Having Thought*, p. 207-237.
19. See especially Chapter 1, "Environment as a Challenge to Aesthetics," in *The Aesthetics of Environment*.
20. "...formal semantics, by its defining assumptions, is at odds with the contemporary theory of metaphor... From the perspective of formal semantics, the phenomena that the contemporary theory of metaphor is concerned with are either nonexistent or uninteresting, since they lie outside the purview of the discipline." George Lakoff in "The Contemporary Theory of Metaphor," p. 248.
21. Michael J. Reddy on the "Social Implications" of information theory in "The Toolmaker's Paradigm and The Conduit Metaphor," in *Metaphor and Thought*.
22. *ibid.* In this classic story, Reddy vivifies the problems inherent in information theory when two isolated cultures with radically different repertoires attempt to exchange instruction sets.

Bibliography

- Berleant, Arnold. 1992. *The Aesthetics of Environment*. Philadelphia. Temple University Press.
- Dennett, Daniel. 1991. *Consciousness Explained*. Boston, Toronto and London. Little, Brown and Company
- Diethelm, Jerome. 1998. *Designing in an Environmental Field: Essays, Metaphors, Kasinas*. Eugene, Oregon. Aurora Books.
- Haugeland, John. 1998. *Having Thought*. Cambridge Mass. and London, England. Harvard University Press
- Johnson, Mark. 1993. *Moral Imagination*. Chicago. The University of Chicago Press.
- McDowell, John. 1998. *Mind, Value and Reality*. Cambridge, Mass. and London, England. Harvard University Press.
- Lakoff, George. 1993. "The Contemporary Theory of Metaphor," in *Metaphor and Thought*, Second Edition.
- Mc Ginn, Colin. "Will We Ever Understand Consciousness?" in *The New York Review of Books*, June 10, 1999. p. 44-46.
- Ortony, Andrew ed. 1993. *Metaphor and Thought, Second Edition*. Cambridge, England. Cambridge University Press.
- Putnam, Hilary. 1990. *Realism with a Human Face*. Cambridge, Mass. Harvard University Press.
- Reddy, Michael J. 1993. "The Toolmaker's Paradigm and The Conduit Metaphor," in *Metaphor and Thought*, Second Edition.
- Rorty, Richard. 1998. *Truth and Progress*. Cambridge, England. Cambridge University Press.
- Schön, Donald P. 1993. "Generative metaphor: A perspective on problem-setting in social policy," in *Metaphor and Thought*, Second Edition
- Vendler, Helen. 1998. *The Art of Shakespeare's Sonnets*. Cambridge, Mass. and London, England. Harvard University Press.
- White, Daniel R. 1998. *Postmodern Ecology*. Albany, New York. State University of New York Press.