

Cues are NOT Codes

*Implications for Inquiry, Indexicals,
and Incommensurability*

Michael Lissack
Sept. 2004

“When I use a word,” Humpty Dumpty said in a rather scornful tone, “it means just what I choose it to mean—neither more nor less.”

“The question is,” said Alice, “whether you can make words mean so many different things.”

—Lewis Carroll

A common fallacy underscores much of the management literature – in fact it underscores much of what we take to be expository non-fictional writing. That fallacy is that the semiotic world is composed of codes -- of signs and symbols that can be translated via a look-up table. The “coding” fallacy as I call it underpins a philosophy of realism and its derivative ontologies. By contrast an alternative ontology is also explicated by many of us – though not at the same time as the coding fallacy and often in direct opposition to it – this is the ontology of ‘cues’. Codes have the advantage of definition, cues have the vagueness of situationalism.

We live in a time that is exemplified by fleeting messages,
complex shifting meanings and mercurial contexts.

William Seaman

Our identities are constructed along narrative principles, and
often constructed and reconstructed in the actual telling of
stories about ourselves in daily life, in family groups, etc

Jerome Bruner

'we tell our lives as narratives, but we experience them as
hypertexts'.

Jay Lemke

The territory no longer precedes the map, nor does it survive it.
It is never the less the map that proceeds the territory —
precession of simulacra- that engenders the territory.

Jean Baudrillard

The arbitrary nature of the relation between the sphere of experience and the sphere of concepts or ideas is the main characteristic of the gray zone. It is a source of an unprecedented freedom to produce new works but also of an overwhelming relativism, loss of meaning, and narrowing range of common references and, as a result, of a general cultural malaise. The nature of this malaise can be easily illustrated by the dilemma facing most contemporary architects. On the one hand, it is assumed that true creative architecture should be free of historical and other unnecessary cultural references in order to be as original and unique as possible. And yet, on the other hand, it is expected that the result should be universally understood, appreciated, and accepted.

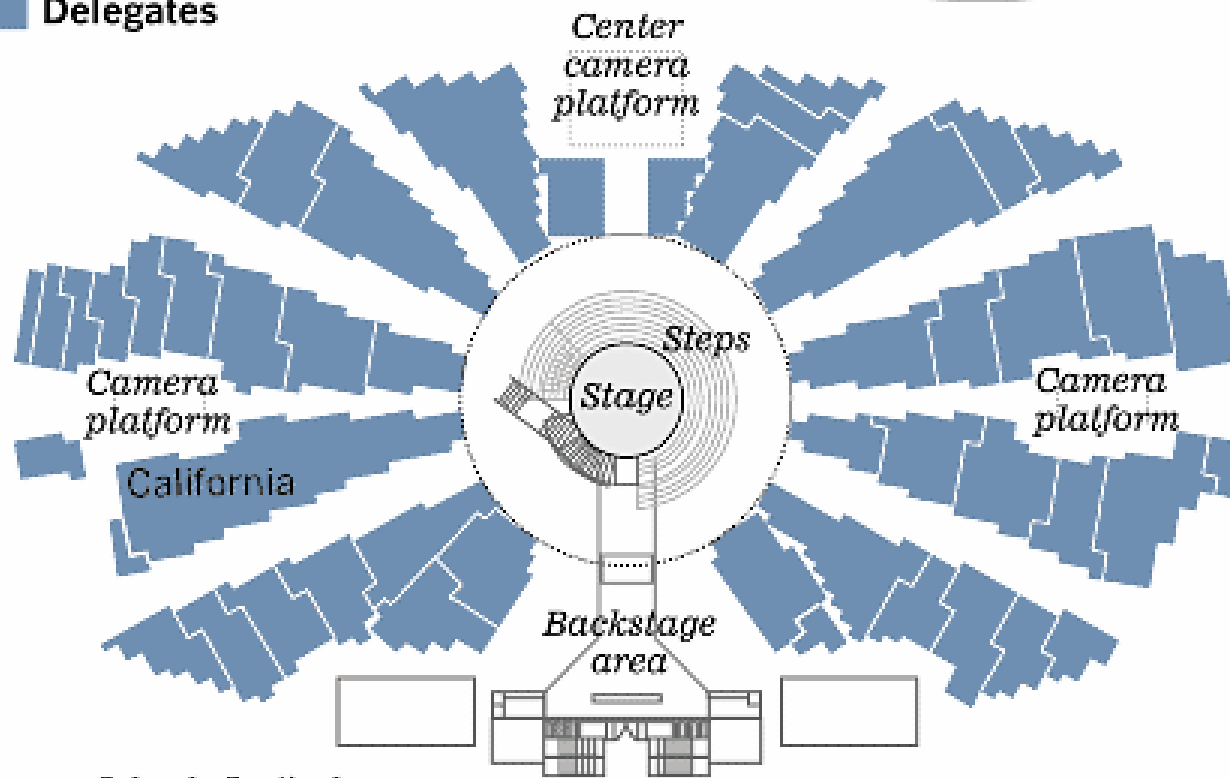
Dalibor Vesely

The medium is the message.
Marshall McLuhan

Is medium code or cue?

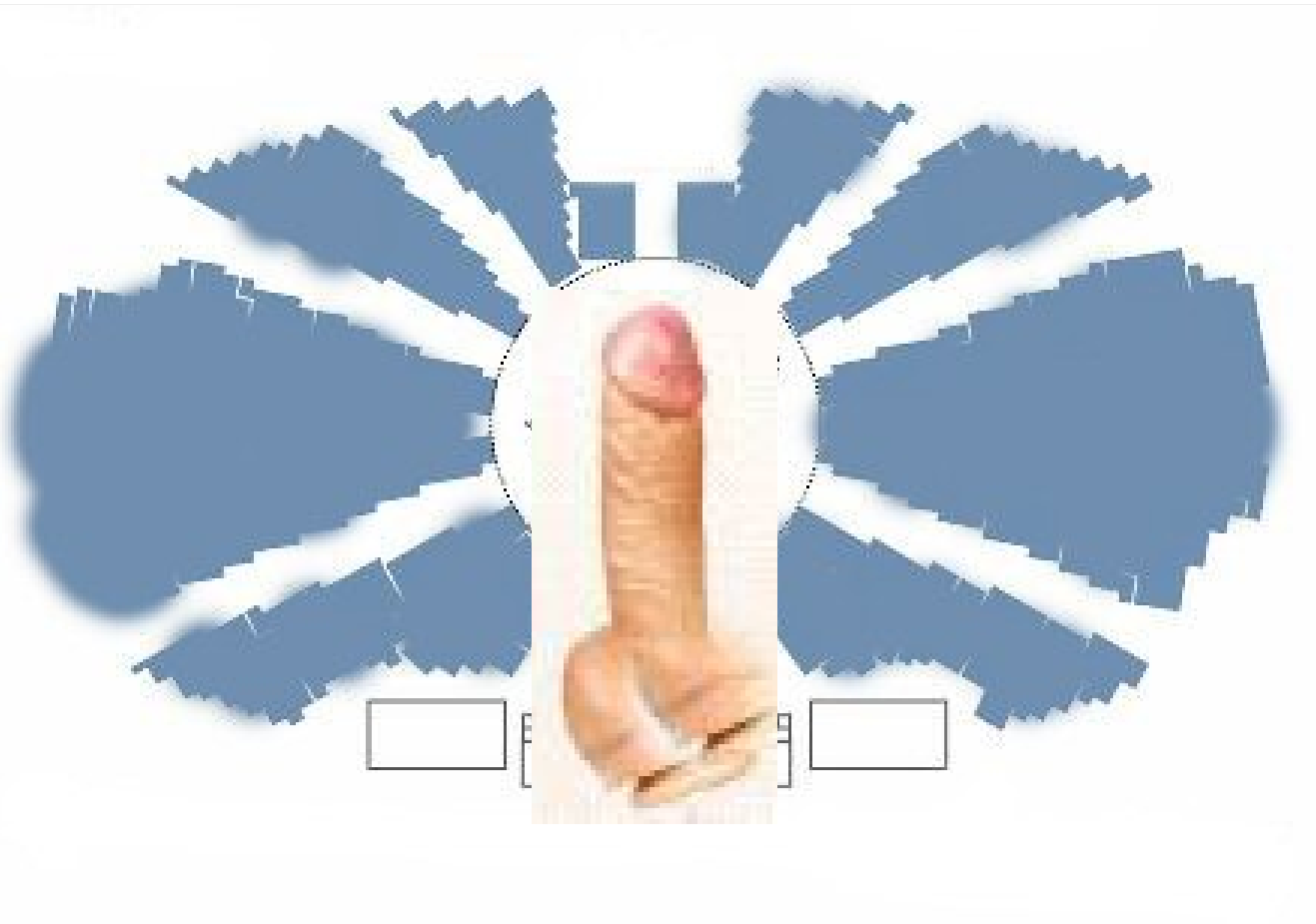


■ Delegates



Source: Orlando Sentinel

MARK HAFER *Los Angeles Times*







Codes are reductions. Any reductions effectiveness is determined not only by the nature of the reductive process but also by the context in which the reduction is employed.

Cues by contrast are a surface impression of an active network.

Codes can be dealt with via lookup tables, statistics and Shannon's information theory.

Cues require narrative, description, and psychology.

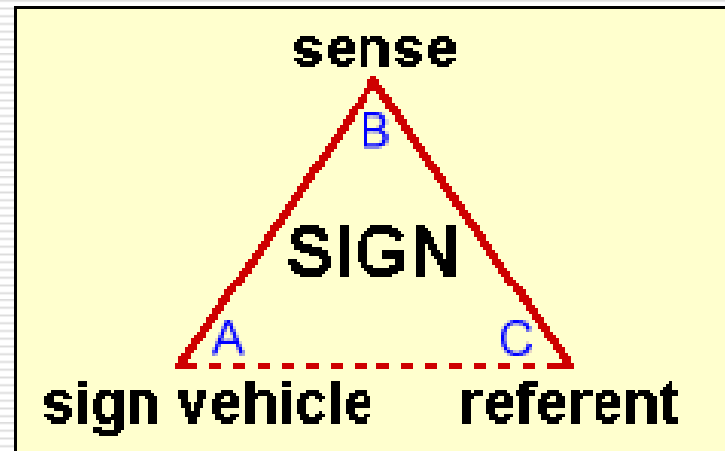
To assume or assert that messages consist of codes is to ignore much of the meaning.

A Bit of Background

A sign stands for something to the idea which it produces, or modifies. Or, it is a vehicle conveying into the mind something from without. That for which it stands is called its object; that which it conveys, its meaning; and the idea to which it gives rise, its interpretant.

By semiosis I mean an action, an influence, which is, or involves, a co-operation of three subjects, such as a sign, its object and its interpretant, this tri-relative influence not being in anyway resolvable into actions between pairs.

Charles Sanders Peirce



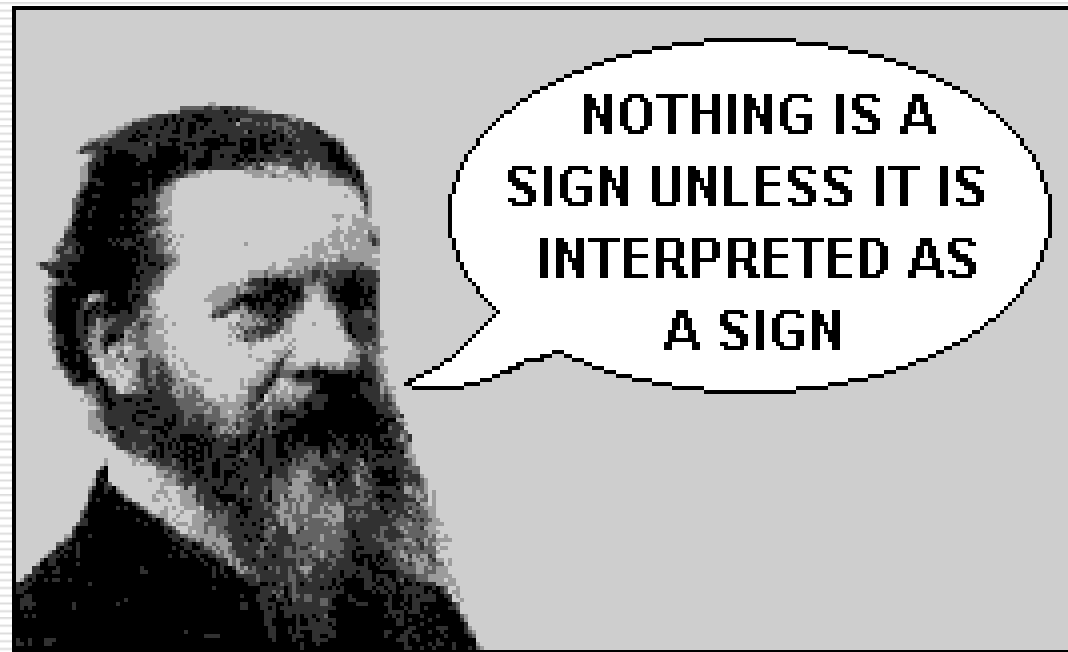
- A: The Representamen: the form which the sign takes (not necessarily material);
- B: An Interpretant: not an interpreter but rather the sense made of the sign;
- C: An Object: to which the sign refers.
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Just what is a sign? For our purposes let us say a sign is a stimulus that directs or influences some organism's behavior in relation to something that is momentarily but not necessarily the dominant stimulus in the situation. Subjectively, something (A) is a sign of something else (B) if an organism (O) behaves in the presence of A in a manner appropriate to B. Objectively, something (A) is a sign of something else (B) if and only if in fact A accompanies, follows or refers back to B. With respect to music it should be obvious that even a single fleeting sound or silence may be a sign. Indeed even a single quality of sound- a quality of pitch, timbre, duration, or intensity- may act as a sign. What matters in a sign situation is that whatever acts as a sign in some way or ways causes an interpreter to take account of an object or event. The ... properties ... have effects on us; they produce dispositions to respond: they potentially are signs.

Wilson Coker

It evokes a specific pattern of general sensory categories, which stands for the stimulus in a similar way in which in a scientific description a network of general concepts is offered as the equivalent of a phenomena of reality. ...The nearest a scientific description can get to an apple is giving the measurements of its weight, size, shape, location, taste, etc. The nearest a percept can get to the stimulus "apple" is representing it through a specific pattern of such general sensory qualities as roundness, heaviness, fruity taste, greenness, etc. If this theory be acceptable, the elementary processes of perception, far from being mere passive registration, would be creative acts of grasping structure, even beyond the mere grouping and selecting of parts. What happens in perception is similar to what at a higher psychological level is described as understanding or insight. Perceiving is abstracting in that it represents individual cases through configurations of general categories.

Rudolf Arnheim



Semiosis is hard: Coding, by contrast, is easy

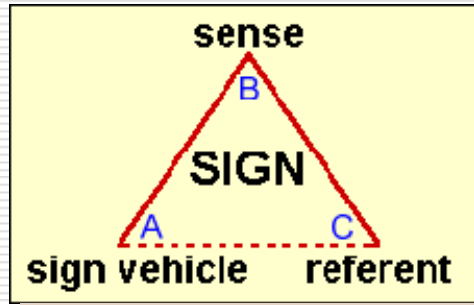
Semioticians seek to identify codes and the tacit rules and constraints which underlie the production and interpretation of meaning within each code.

Daniel Chandler

The process consists of parsing the natural language to extract the different terms it contains, mapping these terms to the concepts available in the ontology and finally extracting the most relevant codes from the intersection between the different concepts. In the process ambiguities are detected and automatically solved.

Frank Montyne

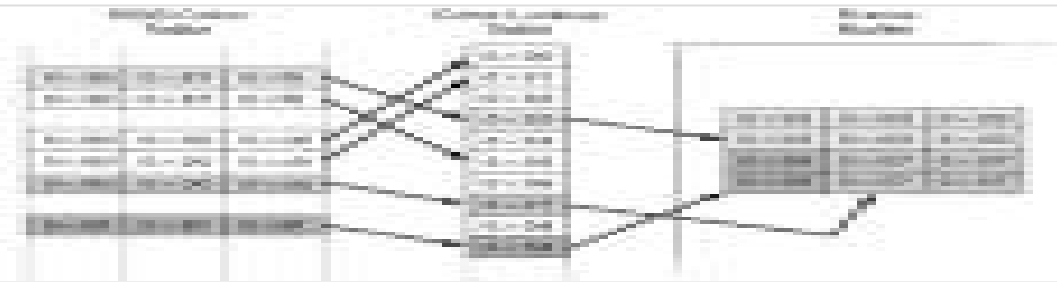
Codes:



Becomes Instead:

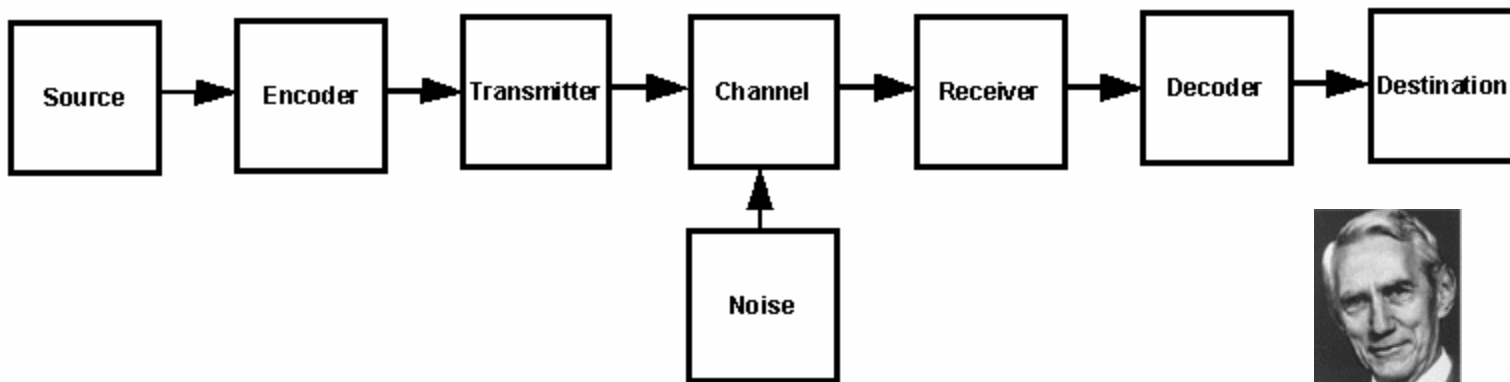
Sign = Referent

Codes are efficient. Lookup tables work. A means x. B means y. C when found in situation g means w and in situation h means z



Codes are separable from attendance, affordance, and effectivities. Codes are assigned semiotic abstractions of varying complexity and whose requisite lookup tables vary in terms of situational specificity. Those who have been trained in the quantitative sciences or whose world view has a foundation in realism are often asserting the primacy of codes.

Shannon's Information Theory



No information can exist without a code.

Walter Gitt



So what do we mean by an observation? In everyday parlance, an observation is just the memory trace left behind in our brains when the outside world impresses itself upon us via our sensory channels of sight, sound, touch, smell or taste...In science we usually try to code these memories by numbers, mostly for the sake of compactness and so that we will have a common scale by which to compare different observations. This kind of coding also has the salutary side effect of providing the basis for representing the observations in symbols, hence allowing us to encode the world in stylized mathematical terms.

John Casti

Since the meaning of a sign depends on the code within which it is situated, codes provide a framework within which signs make sense. Indeed, we cannot grant something the status of a sign if it does not function within a code. Furthermore, if the relationship between a signifier and its signified is relatively arbitrary, then it is clear that interpreting the conventional meaning of signs requires familiarity with appropriate sets of conventions. Reading a text involves relating it to relevant 'codes'.

Roman Jakobson

Outside the licensed domains of literature and jokes, the uncontrollable manifestations of parapraxes and dreams, the possibilities of meaning in a word are stringently limited by its context. The more that context bears down upon the word, the less the word will quiver with signification; until we reach a fully determining context, under whose pressure the word will lie inert, pinned down, proffering its single meaning... But at this point something else will have happened to it: it will have become completely redundant. The context will now allow only one meaning to be perceived in the gap which it occupies and anything — or nothing at all — will be interpreted as providing that meaning.

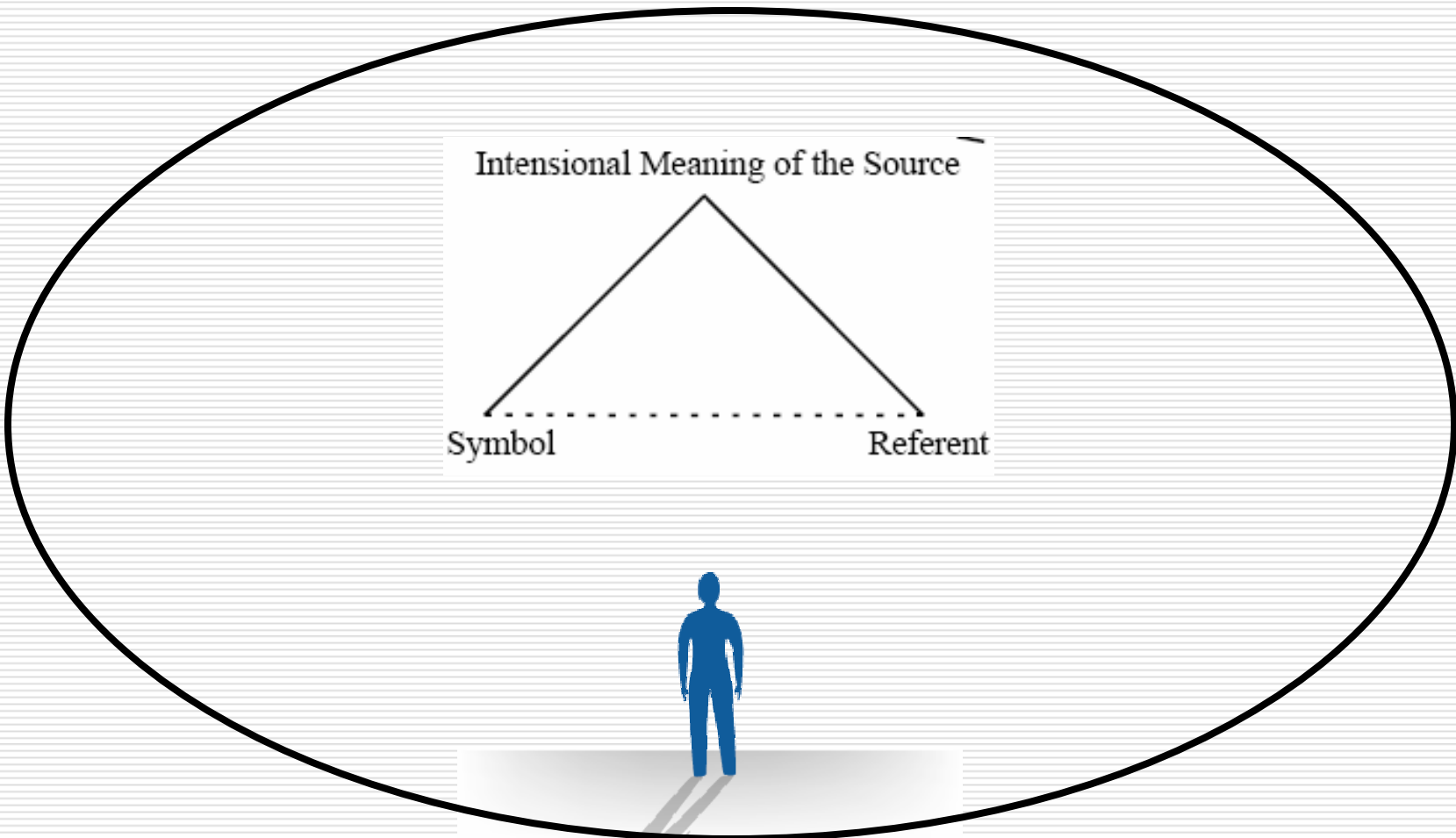
Derek Attridge

If controversies were to arise there would be no more need of disputation between two philosophers than between two accountants. For it would suffice to take their pencils in their hands, to sit down to their slates and to say to each other (with a friend to witness, if they liked): Let us Calculate.

Leibniz quoted by Martin Gardner

Perception depends on coding the world into iconic signs that can re-present it within our mind. The force of the apparent identity is enormous, however. We think that it is the world itself we see in our "mind's eye", rather than a coded picture of it'

Jacques Derrida



But, not all of the world is reducible to codes.

In spite of its dangerous tendency to polysemy, language works well enough, we are told, because of its appearance in a disambiguating context: we are able to choose one of several meanings for a word or sentence because we are guided by the immediate verbal surroundings, the nature of the speech act in which the words are uttered and perceived, the social and historical setting and so on. As speakers we construct our sentences in such a way as to eradicate any possible ambiguities and as hearers, we assume single meanings in the sentence we interpret. The pun however is not just an ambiguity that has crept into an utterance unawares, to embarrass or amuse before being dismissed; it is ambiguity unashamed of itself and this is what makes it a scandal and not just an inconvenience. In place of a context designed to suppress latent ambiguity, the pun is the product of a context deliberately constructed to enforce an ambiguity, to render impossible the choice between meanings, to leave the reader or hearer endlessly oscillating in semantic space.

Derek Attridge

Emergence can be looked at as attention to a shift in scale or to an altering of the boundaries which otherwise determine an "is." Codes are a problem for emergence in that the multiplicity of lookup tables does not provide a need for emergence to occur. Yet, emergence is also a problem for codes. When situations are far too numerous for the lookup table to function, when the many variables which must be both attended to and looked up are suggestive of a non-computable problem, emergence is a suggestive answer for how it is that we mere humans are able to cope and respond.

We know now that a text is not a line of words releasing a single 'theological' meaning (the "message" of the Author-God) but a multidimensional space in which a variety of writings, none of them original, blend and clash. The text is a tissue of quotations drawn from the innumerable centres...

Roland Barthes

What we normally refer to as reality, believing that it is something fixed and absolute, is always a result of our ability to experience, visualize, and articulate—in other words, to represent so as to participate in the world. There is a point where the interpretation and the way of making come so close to each other that they become fully reciprocal: what we know contributes to what we make, and what is already made contributes substantially to what it is possible to know.

Dalibor Vesely

Cues are the operants perceived and attended to which trigger a meaning and/or an action by the attendee. The operant might be a physical affordance or its corollary effectivity or it might be a semiotic affordance and or its corollary effectivity. It is important to recognize that attendance is critical to cue operants. In the absence of attendance there is no cuing and in the absence of the activity or cognition of cuing there is no cue.

Cues are the label for the emergent meaning which results from an intersection of attendance to environment, situation, history, and cognition such that semiotic affordance and/or effectivities are perceived to allow for action, assignment of cognition, label, or code, or for boundary breaking.

To be comprehended at all adequately, the whole concept of meaning as a property of signs must be understood as being of the most fundamental — the biological — order of things. The very fact that some organism tends to respond or does not respond to a stimulus meets the basic condition for attaching meaning to that stimulus. Thus any attitude-feeling, emotion, or desire — any anticipation, any action, or any state of consciousness is significant only insofar as it is a response or a disposition to respond to some stimulus within the internal or external environment of the organism.

Wilson Coker

It is an objectivist prejudice of astonishing naiveties for our first question to be, 'what does this picture represent?' Of course, that is a part of our understanding of a picture. Insofar as we are able to recognize what is represented, that recognition is a moment of our perception of it." In symbolic representation, "the symbolic does not simply point toward a meaning, but rather allows that meaning to present itself." In other words, "what is represented is itself present in the only way available to it.

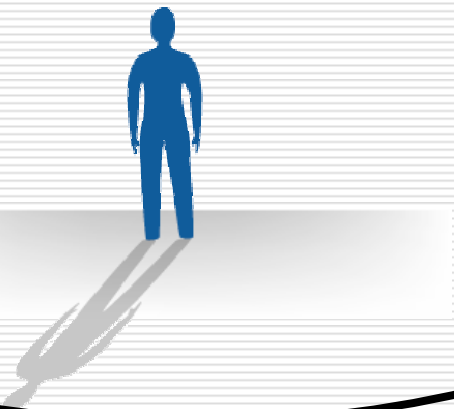
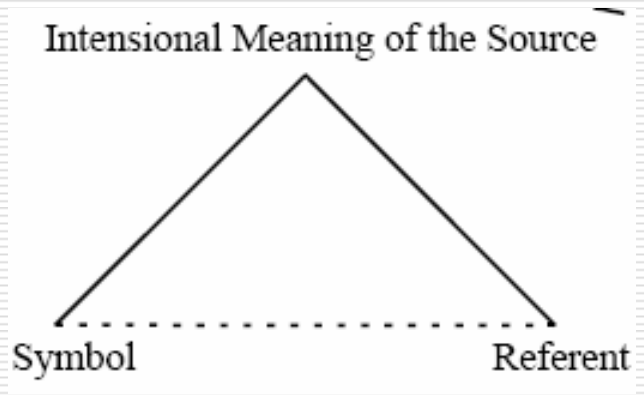
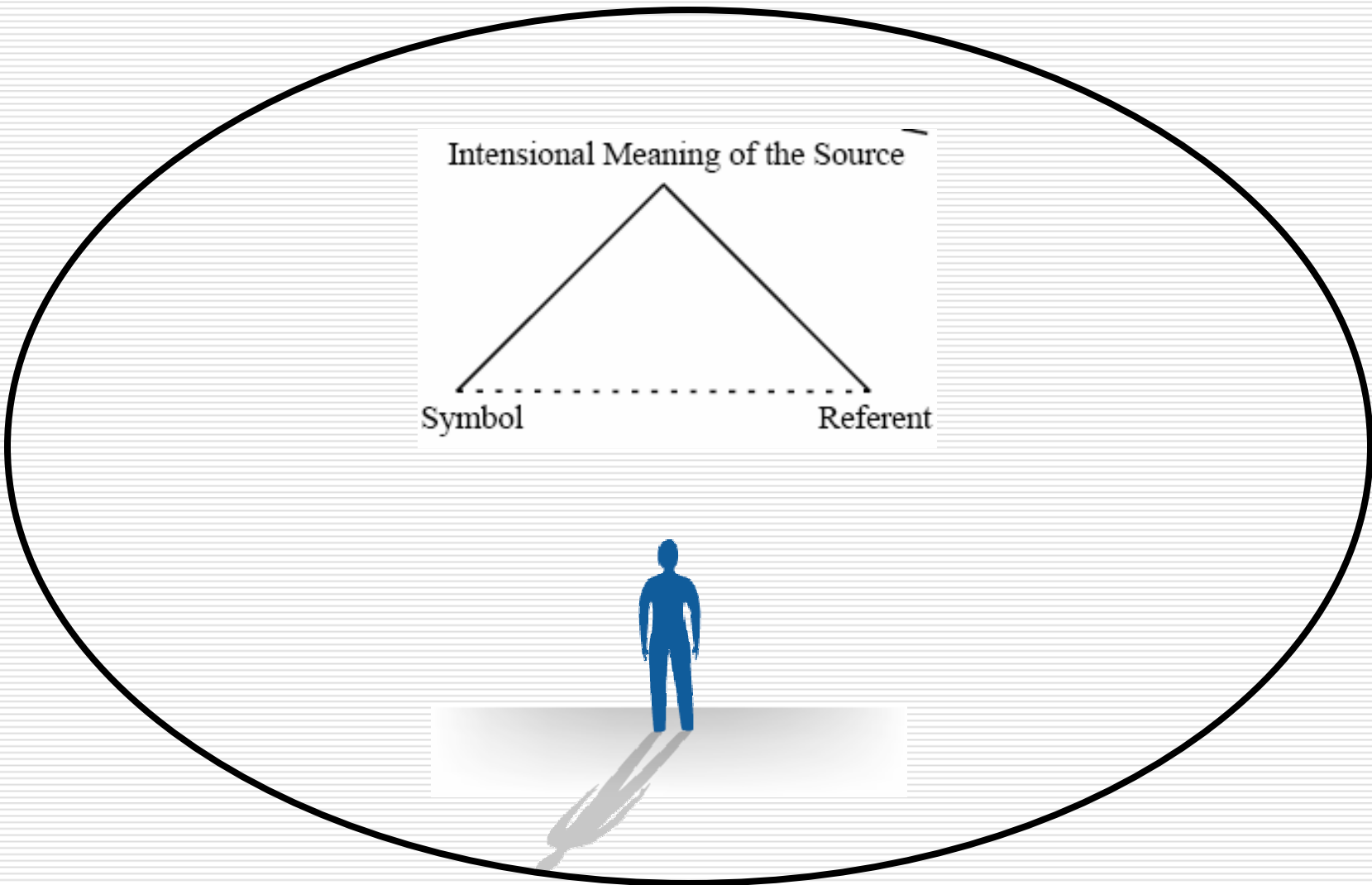
Hans-Georg Gadamer

In applying a code to the text, we may find that it undergoes revision and transformation in the reading process; continuing to read with this same code, we discover that it now produces a 'different' text, which in turn modifies the code by which we are reading it, and so on. This dialectical process is in principle infinite; and if this is so then it undermines any assumption that once we have identified the proper codes for the text our task is finished. Texts are 'code-productive' and 'code-transgressive' as well as 'code-confirming'.

Terry Eagleton

Every sign, linguistic or non-linguistic...can...break with every given context, engendering [and inscribing itself in] an infinity of new contexts in a manner which is absolutely illimitable.

Jacques Derrida



Situations represent the most complete way of understanding our experience of the surrounding world and the human qualities of the world. They also endow experience with durability in relation to which other experiences can acquire meaning and can form our memory and history. The temporal dimension makes the process of differentiating and stabilizing situations more comprehensible. The deeper we move into history, the more situations have in common until we reach the level of myth, which is their ultimate comprehensible foundation. Myth is the dimension of culture that opens the way to the unity of our experience and to the unity of our world. The persistence of primary symbols contributes decisively to the formation of secondary symbols and finally to the formation of paradigmatic situations. Paradigmatic situations are similar in nature to institutions, deep structures, and archetypes.

Dalibor Vesely

The concept of resonance is crucial to this overall picture. It is the tendency for certain recurrent behaviors to grow, as initially infinitesimal vibrations or patterns become self-reinforced, due to the way in which they fit within the spatiotemporal geometry of a bounded system, often aided by some feedback. Such behaviors also decay after the excitation energy is removed. Resonance also involves the idea of coupling among systems in which the excitation of one system is transferred to another. In this way, information is transmitted and further, may be propagated through a medium

David Rosenboom

The words or the language, as they are written or spoken, do not seem to play any role in my mechanism of thought. The psychical entities which seem to serve as elements in thought are certain signs and more or less clear images which can be "voluntarily" reproduced and combined... The above mentioned elements are, in my case, of visual and some of muscular type. Conventional words or other signs have to be sought for laboriously only in a secondary stage, when the mentioned associative play is sufficiently established and can be reproduced at will.

Albert Einstein

Properly speaking there are not signs, but only sign functions...A sign function is realised when two sign functives (expression and content) enter into mutual correlation, the same functive can also enter into another correlation, thus becoming a different functive and therefore giving rise to a new sign-function. ... The classical notion of the sign dissolves into a highly complex network of changing relationships. Semiotics suggests a sort of molecular landscape in which we are accustomed to recognize as everyday forms turn out to be the result of a chemical aggregation and so-called "things" are only the surface appearance assumed by an underlying network of more elementary units.

Umberto Eco

In re combinatorial environments, meaning is characterized by a fluid, shifting, continuous state of becoming. In this form of fleeting context, content is always emergent, arising out of the superimposition and or juxtaposition of a series of "poetic" elements and processes functioning in relation to one another. Fleeting and shifting qualities of engagement become an experiential focus. During interaction, the user, through direct experience, encounters a series of potential "states" of meaning. We should always view these states as a temporary glimpse at a continuous process of meaning-becoming, motivating the thought and behavioral reaction of the user.

William Seaman

When I contemplated Camille at daybreak on her deathbed, I noticed-in spite of all my grief-that my eyes perceived more than anything else the different colorations of her young face. Even before I decided to record her likeness for the last time, my painter's instinct had seen the blue, yellow, and gray tonalities cast by death. With horror I felt myself a prisoner of my visual experiences and compared my lot to an animal that turns a millstone.

Claude Monet

Signs are bound by a necessity that is rooted in the perceptual habits of the addressee.... Form is perceived as a necessary, justified whole that cannot be broken. Unable to isolate referents, the addressee must then rely on his capacity to apprehend the complex signification which the entire expression imposes on him. The result is a multiform, plurivocal signified that leaves us at once satisfied and disappointed with the first phase of comprehension precisely because of its variety, its indefiniteness. Charged with a complex scheme of references mostly drawn from memories of previous experiences, we then refer back to the initial message, which will be inevitably enriched by the interaction between those memories and the signifieds yielded in the course of this second contact — signifieds that will already be different from those apprehended initially, given the new perspective and the new hierarchy of stimuli of this second approach. This transaction between the memory of previous experiences, the system of meanings that has surfaced during the first contact and the new system of meanings that is emerging out of a second contact automatically enriches the meaning of the original message

Umberto Eco

The emergent meaning of cues requires that we extend the concept of affordances to the semiotic sphere. A semiotic affordance is the possibility that a situation or a cognitive sign offers to an attendee. Semiotic affordances are not properties of the situation or cognition but rather are joint properties of the situation/cognition/attendee and attention. In the absence of attention there are no semiotic affordances.

Semiotic affordances have their corollaries in semiotic effectivities. The potentiality of an attendee to make use of a possibility afforded to him/her by the semiotic situation/cognition thus corresponds to the potentiality of an animal to take advantage of a physical affordance afforded it by the environment or the particular subset thereof which the animal has attended to.

The broader context in which memory is situated is decisive not only for the structure but also for the content of memory. A visit to a familiar building or place, as we often say, "brings back memories." However, it is far from clear what the phrase actually means. What had been forgotten—the building? or the "retained" experience? A similar thing happens when we recognize the face of a friend whom we have not seen for many years. The actual recognition cannot be explained by a correspondence of perception and memory. In this process, what is seen must so organize itself as to present a picture in which we can recognize our former experience. As Merleau-Ponty notes, "the appeal to memory presupposes what it is supposed to explain."

Dalibor Vesely

Deep Blue Something - Breakfast at Tiffany's

You say that we've got nothing in common
No common ground to start from
And we're falling apart
You'll say the world has come between us
Our lives have come between us
But I know you just dont care

And I said "What about Breakfast at Tiffany's?"
She said, "I think I remember the film,
And as I recall, I think we both kinda liked it."
And I said, "Well, thats the one thing we've got."



Semiotic affordance and effectivities are “cued” when an observer pays attention to some “cue” and has a cognitive experience. These experiences will then be processed for later attention and action.

[One] does not have to restructure separately all of his earlier concepts. . . . Once a new structure has been incorporated in thinking . . . it gradually spreads to the older concepts as they are drawn into the intellectual operations of the higher type.

Lev Vygotsky

Management tools include infrastructure and story.

Code based viewpoints suggest these tools are ineffective.
Cue based viewpoints suggest they are of high effect.

But, high effect does not translate to high accomplishment of intent. Managerial intention is as often overridden by situation as it is by bad choices. Indeed, there may be a chicken and egg problem here. The selection of infrastructure may depend upon the stories told around it and the selection of stories may be demanding that the infrastructure be pre-selected first.

Configurational analysis attempts to look at nondiscursive regularities to extract the regular invariants which then are labeled as the key elements making up a whole (through their interrelations) -- ie identifying the codes.

Cueing analysis would then ask what are the regular variants (those elements which vary in degree or by scalar quality) that are present within a co-occurrence of context and whole. It is the study of those regular variants which will reveal the story elements the discursive elements which underlying coherence in cueing.

The discourse will refer to the invariants as the structural elements which are at foreground and background but it is a story about the variants. And it is to those variants which management must attend ONCE a coherent (in the coding sense) infrastructure is in place.

Those who operate in the world of codes are less than tolerant of the vagaries suggested by cues. Those vagaries are suggestive of inconsistencies and incompleteness that bother the code people. By contrast those who are more comfortable in the world of cues are less bothered by the assertions of the coders that there is such a thing as exact meaning and that lookups are appropriate. In reality both groups make use of the conceptual framework of the other, but the cuers are usually more explicit when making sue of codes and the coders are usually more emotional (and want to declare not themselves) when making use of cues.

The takeaway:

Cues are not codes. They require different analysis and different tolerances.

Stories often work because of cues.

Communication often fails because of cues.

Forwarned be the management who professes to believe only in codes.

The 21st century is the century of cues.
