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Major Metaphors of Communication and Some Constructivist Reflections on Their Use

Klaus Krippendorff

University of Pennsylvania, kkrippendorff@asc.upenn.edu

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Abstract
The following essay is about human communication. Traditionally, one would define the concept, proceed to force a variety of experiences into its terms and declare the exercise a success if it appears to capture a great deal of territory. However, while tempting, such constructions of reality also are rather lonely ones devoid of contributions by Others that populate reality as well. In contrast, this essay seeks first of all to listen to everyday expressions of notions of communication. This intent is grounded in the belief that their ordinary nature does not disqualify them when comparable scientific conceptions are available. Indeed, most social scientific theories can be shown to have grown out of ordinary folk wisdom. Scientific conceptions are just more formalized and subjected to different kinds of tests than the notions practiced in everyday life. To listen also means to have an understanding of the language in which these everyday notions arise and an understanding of the communication practices in which they come to be embedded. This essay therefore also is about understanding Others’ understanding of the kind of communication practices in which we ordinarily participate. In pursuit of this second-order understanding, I will start the paper with a brief theory of metaphor, one that goes beyond mere rhetorical formulations and links language with the creation of perceived realities. Following it will be a survey of what I consider to be the six most pervasive metaphors of human communication in everyday life. Each turns out to entail its own logic for human interaction and the use of each creates its own social reality. This descriptive account is intended to provide the 'data' or the ground from which I shall then develop several radical constructivist propositions. These are intended to reflect on how a social reality could be conceived that does afford so many incompatible ways of communicating, on the individual contributions to understanding, understanding of understanding, and viability in practicing such metaphors, on what makes communication a social phenomenon, on three positions knowers can assume in their known and the theories of communication commensurate with these positions. Then I will sketch some aspects of mass communication in these terms and comment on its research. Propositions of this kind should prove useful in efforts to construct scientific communication theories or, to be less ambitious, to understand communication as a social phenomenon that involves each of us with other human beings. For lack of space, the concern for issues of mass communication had to be severely curtailed, leaving the readers to continue on their own.

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Major Metaphors of Communication and some Constructivist Reflections on their Use

Klaus Krippendorff
The Annenberg School for Communication University of Pennsylvania

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Introduction and Abstract

The following essay is about human communication. Traditionally, one would define the concept, proceed to force a variety of experiences into its terms and declare the exercise a success if it appears to capture a great deal of territory. However, while tempting, such constructions of reality also are rather lonely ones devoid of contributions by Others that populate reality as well.

In contrast, this essay seeks first of all to listen to everyday expressions of notions of communication. This intent is grounded in the belief that their ordinary nature does not disqualify them when comparable scientific conceptions are available. Indeed, most social scientific theories can be shown to have grown out of ordinary folk wisdom. Scientific conceptions are just more formalized and subjected to different kinds of tests then the notions practiced in everyday life. To listen also means to have an understanding of the language in which these everyday notions arise and an understanding of the communication practices in which they come to be embedded. This essay therefore also is about understanding Others' understanding of the kind of communication practices in which we ordinarily participate.

In pursuit of this second-order understanding, I will start the paper with a brief theory of metaphor, one that goes beyond mere rhetorical formulations and links language with the creation of perceived realities. Following it will be a survey of what I consider to be the six most pervasive metaphors of human communication in everyday life. Each turns out to entail its own logic for human interaction and the use of each creates its own social reality. This descriptive account is intended to provide the 'data' or the ground from which I shall then develop several radical constructivist propositions. These are intended to reflect on how a social reality could be conceived that does afford so many incompatible ways of communicating, on the individual contributions to understanding, understanding of understanding, and viability in practicing such metaphors, on what makes communication a social phenomenon, on three positions knowers can assume in their known and the theories of communication commensurate with these positions. Then I will sketch some aspects of mass communication in these terms and comment on its research.

Propositions of this kind should prove useful in efforts to construct scientific communication theories or, to be less ambitious, to understand communication as a social phenomenon that involves each of us with other human beings. For lack of space, the concern for issues of mass communication had to be severely
curtailed, leaving the readers to continue on their own.

Metaphor

When English speakers talk about some kind of failure of communication, they might say:

- Communication broke down.
- He didn't come across as well.
- Her thoughts were locked in cryptic verse.
- The message got lost in the process.
- You just don't understand.
- It didn't compute.
- She was screaming against a brick wall. There was no chemistry.

All of these expressions rely on metaphors and it seems one can hardly think about communication without them.

Notions of metaphor have ancient roots. In his *Topica*, Aristotle urged a distinction between definitions and metaphors, arguing that one should be weary about the latter's ambiguity (Ortony, 1975:3). "Metaphor," he wrote in his *Poetics*, "consists in giving a thing a name that belongs to something else" (Sontag, 1988:5). Aristotle's suspicion that there is something devious in the use of metaphors has survived in the contemporary distinction between literal language, preferred in scientific and technical discourse, and metaphorical language whose aesthetic qualities are of interest largely to literary connoisseurs and poets. This distinction privileges an observer-independent external reality as the ultimate arbiter of what can be said and how.

To me, this notion of metaphor is utterly unproductive. If one is willing to go through the epistemological shift from the earlier (1933) to the later Wittgenstein (1953), if one is willing to embrace the anthropological ideas of Sapir (1949), Whorf (1956), and Wagner (1981), or recent philosophical thoughts from Rorty (1989) to Glasersfeld (1984, 1991), in other words, if one is willing to abandon the view of language as a medium for representing a reality outside of it in favour of one that sees language as a medium through, which speakers organize their experiences and engage in interaction with each other, then this leads to a vastly more powerful notion of metaphor.

Let me sketch a theory of metaphor using the expression "there is no chemistry". as an example. Chemistry is a domain of 'science writing about transformations of chemical compositions. It takes place in (human) communication but can say nothing about it. Hence, for chemists or readers who take a literal view of language the phrase in question would not make sense. But as an expression in everyday life it may say a great deal about what happens between people. A theory of metaphor should address the question of why this might be so:

(1) All metaphors carry explanatory structures from a familiar domain of experiences into an
other domain in need of understanding or restructuring. The example carries knowledge from chemistry into the domain of human interaction. To do their "work",

(2) metaphors require seeing some structural similarities between these two domains, however far fetched these may be. Chemistry is concerned with how chemical substances interact and affect each other's compositions. The domain of human communication is defined by interaction among people that do something with and to each other. This similarity resides, of course, as much in the use of words as in the experiences conceptualized by them. We can speak of bonding in both empirical domains but mean entirely different things. Black (1962) speaks of interaction," alluding to the creative effort of fitting selected features into a pattern of similarity. But most importantly,

(3) metaphors have entailments (Lakoff and Johnson, 1980) for the target domain they thereby organize far beyond any initial structural similarity. Our example makes human interaction into a product of instant and involuntary reactions to the nature of the individuals involved. "Good chemistry" attracts, creates synergy, unifies, "bad chemistry" repulses, spells difficulties, separates. Explaining human relationships in terms of chemistry entails no choices and absolves individuals of any responsibility for the bonding or lack of it that takes place, virtually outside of their control. "Chemistry makes the decisions for you." While metaphors occur in language and lead to constructions that are as optional or arbitrary as all linguistic meanings are, there is no doubt that everyday users of this vocabulary consider "chemistry" a very real experience. Hence,

(4) metaphors organize their users' perceptions and, when acted upon, can create the realities experienced. "There is no chemistry" is a metaphorical statement, but its very utterance can create or constitute the fact it states, which happens here to be a social phenomenon. In the human interaction thus constructed, the original or source domain of the metaphor, the discipline of chemistry, becomes secondary and recedes into the background of unrecognition.

Thus, metaphors are not hidden comparisons as Aristotle suggested and many contemporary literary analysts continue to maintain. Unlike analogies, metaphors are fundamentally asymmetrical. They are the linguistic vehicles through which something new is constructed. In Lakoff and Johnson's (1980) definition of if metaphor (as) understanding and experiencing one kind of thing in terms of another," the other" is rarely noticed as such. It is "the terms" that create the "thing" experienced. Thus, metaphors are not mere poetic embellishments in language, they affect their users' perceptions and actions. Metaphors are also far from ambiguous and vague. Their entailments can be traced with considerable certainty and in as much detail as desirable, leading to a reality equally clear and obvious to the user of the metaphor as to its analyst. The 18th century philosopher Gambatisto Vico already recognized metaphors as the most important manifestation of human creativity.

Let me show this now in several metaphors of communication.

Metaphors of communication
The Container Metaphor

The expression "her thoughts were locked in cryptic verse" depicts language as a container of particular objects, here thoughts, to which access seems complicated by the absence of a key. This phrase may have been carefully constructed, but the idea that communication consists of sending discreet messages from one place to another and that messages contain something, thoughts, information, instructions, meanings, feelings, etc. permeates most everyday accounts of language (Reddy, 1979) and communication and, I would add, dominates the language of communication research as well. Some communication scholars jokingly call it "the bucket theory of meaning" but, to understand everyday conceptions of communication, I am suggesting that we have to take this prevailing metaphor seriously.

Indeed, we have no qualms asking someone what is in a letter, what someone got out of a lecture, or we object to someone reading something into a statement that wasn't there to begin with. In communication research we analyze THE content of television by means of content analysis, judge a speech meaningful or as having no meaning at all. We might tell a writer that if she hasn't put her heart into what she says, she hasn't said anything. Someone who hasn't anything to say uses empty phrases. Similarly, engineers speak of the information content of signals as if their contents were an entity separate from the signals carrying it. All these everyday expressions depict messages, language, pictures, even signals as containers for meanings, ideas or things that preserve them on their passage to a destination where they can be removed.

One entailment of this metaphor is our markedly unequal cultural emphasis on the content of messages that leaves language and communication processes transparent, unreflected and unattended. After all, vessels are mere "means" for storing and transporting valuable goods. Why should containers be more important than their contents? Indeed, journalists are concerned with the truth and accuracy of what is being reported rather than with why it is published and how the choice of a particular medium shapes what it becomes to its recipients. McLuhan's proposition that "the medium is the message" (McLuhan & Fiore, 1967) sought to shift attention away from mass media content. Bateson (1972) and Watziawick et al.'s (1967) distinction between the content and the relationship aspects of human communication attempted to put the container metaphor in perspective. But in everyday life non-content or relational aspects of communication are rarely addressed.

A second entailment of this metaphor renders communication contents as entities with objective qualities. The paper on which something is written, the electronic impulses to which loudspeakers respond, the sound of voice, all have a physically measurable and thing-like existence. With this in mind, it would indeed be difficult to imagine that material containers could hold immaterial substances. Thus, the thoughts in our example become thing-like entities as well. We get something out of a course of study. We receive pieces of information. We write news items. We break media content into analyzable units, not much different from how geologists analyze stones into different categories. And, we compose letters or music not much different from how mechanics assemble a technical device. As objective entities, contents must exist independent of human experiences.
A third entailment is the conception of communication as transportation, as a problem of getting the contents of messages, thoughts, feelings, meanings, information, and other entities from here to there. The expression "the message got lost in the process" exemplifies this. Understanding, which may happen only after a message is transported to its destination, takes place by contact, as a consequence of exposure, or by digestion. It is effortless, self-evident, direct, instantaneous, natural, and hence entirely unproblematic. After removing contents from their containers, no interpretation, no reasoning, no particular cognitive effort is required to comprehend them. The frequent reference to media consumption amplifies this, as well.

A fourth is the acceptance of sharing as the logical consequence of if not standard for assessing what "good" communication is. Sharing is presumed to result from exposure to the same messages and explains the cause of common knowledge, subscribing to similar values, or thinking alike. In a Venn-diagram of possible contents, sharing denotes the intersection between what different individuals had access to.

In everyday communication, the complaint "you just don't understand" often implies "not as I do." We may feel the need to explore with a person never met before whether we have something in common. Finding we have lived through the same events leads us to conclude we share experiences, a history, or a background. In content analyses of mass communications, the picture that emerges is often said to be the common denominator of these communications and presumed shared among all competent viewers or readers.

The association of communication and sharing is of ancient origin. This can be seen in the etymology of the word "communication." It has the same root as "common," "commune," "community," even "communism," all of which construct individuals as being in some respects the same, for example regarding habits, world views, or language competence. In the above mentioned Venn-diagram, the areas outside the intersection often are considered sociologically irrelevant, containing either entirely subjective "idiosyncrasies" or evident communication failures. Herein sharing serves as a strong social norm.

The use of container metaphors profoundly affects the social relations possible among communicators, within community, and society. Naturally, by taking message contents to have an objective or observer-independent existence leads one to conclude that it is the "follies of human perception" that can lead receivers of same messages astray and produce something other than sharing. Indeed, just as we would not believe anyone who claims able to pour wine, milk, or oil out of a bottle filled with water, the physics invoked by the container metaphor implies that one can remove from a message only, what had been put into it and that this would have to be the same for everyone. It offers no logical place for variations or discrepancies in interpretation.

When such discrepancies do become apparent, and this is rather common in everyday communication, it seems far more usual to (i) look for causal explanations, (ii) consult authorities on the matter or (iii) fight
them out then to (iv) abandon the metaphor for bringing these discrepancies about.

The causes of such discrepancies typically come to be explained either as human errors, as consequences of pathological conditions, as the result of devious intentions, or as mere entertainment, magic for example. Apparently, these explanations call upon various standards of objectivity. Those who claim the ability to explain such discrepancies must consider themselves free of them and thereby put themselves into the position of outside observers or superior scientists to whom such standards may not apply.

Discrepancies that cannot be explained that way, may be submitted for mediation by specialized authorities. In this regard, the container metaphor privileges the authors or producers of messages. After all, "authority" derives from the word "author," which designates the one who must know what he or she put into his or her messages. Without access to originators, the metaphor virtually creates the need for various authorities on meanings - dictionaries, linguists, institutionalized procedures, and ultimately the courts - that can decide among incommensurate readings of a message or text. These authorities are based on claims of access to a reality at the expense of those willing to subject themselves to their judgments. It is the submission to such authorities that can generate their phenomena.

Discrepancies that can be neither explained nor mediated may, thirdly, yield physical violence. It is truly amazing how much violence, whether in families or in international conflicts, is predicated on the absence of agreements on whose interpretation is right and who has the authority to decide on what Others must accept as true (Krippendorff, 1988: 254-5).

It would be easy to discredit the container metaphor for suggesting a misleading logic of communication, but this would discourage us from listening to everyday practices of constructing communication. Clearly, the container metaphor is very much alive, widely used in everyday human communication, provides the conceptual foundation of a great number of inter-subjective phenomena, and has social entailments worthy of further exploration. I shall be briefer in the following.

The Conduit Metaphor

In the 19th century, new technologies entered human communication. Early experiments with continuous sources of electricity during its first quarter already led to commercial telegraph lines during the second. The telephone, invented as recent as 1876, was already widely in use by the turn of this century. The speed of this technical development was staggering, leaving everyday understanding of how it worked far behind. Developments like this naturally attract new metaphors that could import suitable explanatory structures from elsewhere, organize otherwise incomprehensible experiences, and give direction to technical developments. Initial questions about how physically manifest messages could be "squeezed through copper wires already employed vocabulary from fluid mechanics which in turn provided the metaphor for this new form of communication. The wire became a tube through which something could flow from a source to its sink, much like in a plumbing system.

Recognition of characteristic limitations of these technologies, for example in the use of paper for
writing and printing or in the use of the telephone wires for voice and sound communication, led to the notion of channels. Just as one can not let different fluids run through the same pipe without creating impurities, the conduit metaphor motivated divisions of the spectrum of possible human expressions into channels, each describable in terms of different communication characteristics. Besides technical distinctions between different band widths or wirings, we find it natural to distinguish between verbal and non-verbal including gestural channels or, in another system of classification, between auditory, visual, tactile, olfactory and gustatory channels. Under the governance of the conduit metaphor human communication thus became a multi-channel phenomenon.

Experiences with acoustical noise in telephone lines came to be the metaphor explaining various forms of pollutants entering channels of communication. We speak without hesitation of noise sources, including of sources of semantic noise, as if a foreign substance originated outside a channel penetrated it, and became inextricably mixed up with the flow of information. In the analysis of mass media organizations, we speak of gatekeepers who determine the mix of news to the public. In the communication research literature, one-step flow or hypodermic needle models of communication, which depicted content as directly injected into the minds of TV viewers, have now been replaced by two-step flow models. But this adjustment stayed entirely within the conduit metaphor. In conceptualizing knowledge acquisition including perception we talk about filters that let some information through and block others from entering. The expressions "she was screaming against a brick wall" describes a barrier to flow. Not to "come across" assumes a blockage or disconnection. The tendency of the mass media to favour the average viewer, avoid extremes, etc. is called mainstreaming. In describing communication in organizations, we speak of having to go through proper channels, encountering bottlenecks, etc. In accounting for how governmental decisions are channeled through an administration, we refer to long or short pipelines and ask how full they are. We measure actual volumes of communication and compare them to channel capacities. We also complain about overloads. Even engineers, who ought to be familiar with the physics of communication equipment, talk about signals as flowing through wires, carrying information and noise. All of these contemporary conceptions come from hydraulics and depict communication as a flow of certain substances through complex networks.

The conduit metaphor resembles the container metaphor in several respects, which is one reason why Reddy (1979), concerned only with language, does not distinguish between them. For example, the container/content distinction reappears in the channel/flowing substance (fluid) distinction. The finite amount of information a message conveys (a container can hold) here becomes the throughput capacity of a channel. The conduit metaphor shifts attention from transportation in units to continuous flows but retains the idea that entities or substances are preserved in the process. The recent idea of a national information highway reflects this conceptual shift as well.

What comes out of a channel therefore can neither be qualitatively different nor quantitatively exceed what entered it. While messages could get lost, channels may break, develop leaks and what flows through them may become polluted. Save for these imperfections, the conduit metaphor offers no way of explaining discrepancies in reception and therefore invites the same kind of causal explanations, authorities, or fights over correctness as the container metaphors does.
The Control Metaphor

The equation of communication with control has a long history as well. It goes back at least to the Sophists who valued convincing argumentation higher than responsibility and truth. The control metaphor describes communication, first of all, as a causal phenomenon which, once it is conceived as such, becomes available, secondly, as a means to reach particular objectives or as an instrument for realizing manipulatory intents. Thus, the use of this metaphor, thirdly, subordinates all aspects of communication, messages, contents, individual involvements, truths, and social consequences to rational pursuits governed by particular aims.

Evidence for seeing communication as a causal phenomenon is equally abound. We say that the weather report caused the university to cancel its classes, that TV watching affected student grades, that accusations made someone mad, that a statistics forced management to rethink its objectives, that an officer coerced his men to shoot, that someone was unable to resist someone else's argument, etc.

While human communication certainly isn't like forcing floppy disks into someone's brain, control metaphors call for the invention of forces presumed capable of causing desired effects. So, in everyday accounts of human communication we speak of persuasive appeals, compelling arguments, potent communications, powerful documentaries, illocutionary forces, etc. all of which virtually create objective qualities that could be made responsible for the apparent effects.

Control metaphors in human communication entail, secondly, fundamental social asymmetries. Causes and consequences are respectively embodied in controllers and the controlled and this distinction is carried here into nearly all practices of social life. It is implied in the mass media's calculated effort to target messages to mass audiences that are considered mindlessly naive and accepting. It resides in the differences between active and informed senders, producers or entertainers and passive and uninformed receivers or consumers. It is even build right into one-way communication technology, the publishing industry, radio and TV for example, designed for unequal access.

With the aid of control metaphors, controllers, authors, and producers of communications assume the privileged position of knowledgeable agents capable of conceptualizing the process of communication, setting their goals, and judging the success of their own activities. From their point of view, the targets of communication, listeners, readers, or viewers become means. Since these serve their controllers' ends best when they are most predictable, the control metaphor encourages a view of ordinary humans as reactive to stimuli, as causally determined mechanisms. The complicity of positivist social research in sustaining this view is evident in its lack of reflexivity and its insistence on causal theories and propositions of human behavior. In mass communication research, this reduces ordinary humans to what some writers have called cultural dopes who need to be entertained, told what to do, cannot act on their own, and remain essentially powerless in their symbolic world.

With control metaphors in place, communication becomes, thirdly, limited to successful communication.
The volume of textbooks on improving communication skills and techniques and courses on effective public speaking, advertising or management attests to the popularity of this metaphor - not only in rational social organizations but also in everyday life. "You just don't understand" may not only imply a lack of sameness but that its addressee did not conform to the speaker's intentions. When advertisers say "the ad did not communicate" they invariably mean that "it didn't cause the desired effects." Truth, eloquence, community become subservient to the manipulatory intents of the controller. All assertions of successes and failures of communication derive from control metaphors and are grounded in empirical deviations from the causalities they require. Sharing is not entailed by this metaphor.

Finally and a corollary of the preceding, the control metaphor defines a particular perspective and brings into view an empirical domain defined by the controllers' purposes that suppresses other perspectives on the same communication situation. It is well recognized that, from an outsider's perspective, all efforts to control have not only intended but also unintended consequences. One may think about the cultural side-effects of commercial TV, the political repercussions of dirty campaign advertising, or the unanticipated consequences of a lie. Functional sociologists know such omissions from an agent's view as latent (as opposed to manifest) consequences of action. Economists talk about externalities.

As an aside, I should note that cybernetics sees control as residing within circular causal networks. Circles have no asymmetries. In contrast, the control metaphor of communication has been seen to punctuate this circularity unevenly. It privileges the conceptions of a designated controller, for example by distinguishing between the messages sent to direct or cause particular effects and the (feedback) messages returning to inform the controller of successes and failures. Although no government can rule without some listening to' citizens' needs, although no mass media can operate for long without researching their mass audiences, the control metaphor blinds its users to these circularities and renders communication as control of someone or something.

The Transmission Metaphor

The transmission metaphor comes to us from cryptography. Here, the problem is to encipher a perfectly understandable message, also called "clear," into a form, also called "cypher," that unauthorized interceptors can not make sense of but authorized addressees could decipher and read. Cryptography originated in ancient secret societies, became perfected during various wars and has recently become important in efforts to protect electronic business and financial communications.

In his Mathematical Theory of Communication, Shannon (Shannon and Weaver, 1949), who had an early fascination with cryptography, sees "(t)he fundamental problem of communication (a)s that of reproducing at one point either exactly or approximately a message selected at another point."... "A transmitter ... operates on the message in some way to produce a signal suitable for transmission over the channel..." The receiver ordinarily performs the inverse operation of that done by the transmitter, reconstructing the message from the signal" (1949:36). For Shannon, messages are understandable by the human "sources" and "destinations." Signals are intermediate "translations" of these messages from one medium to another, until they reenter a medium that is again accessible to human understanding. A
code describes the process of "translation" by establishing a correspondence between the motions, changes, or choices made in one medium and motions, changes, or choices subsequently occurring in another. Information measures the extent to which coding processes are reversible and thus preserve a pattern. It is a radical departure from the container and conduit metaphors, that meanings reside in human understanding, not in the signals transmitted.

One major entailment of the transmission metaphor lies in the cognitive burden it places on the communicators involved both as senders and as receivers. Whereas the conduit metaphor considers the mere exposure to signs, symbols or information a sufficient condition for their comprehension - the idea that "seeing is believing" applies this conception to television viewing, whereas the container metaphor expects receivers to be able to extract contents from their containers, by reading for example, the transmission metaphor expects communicators to have some model of the encoding and decoding process.

Senders encode their ideas into patterns that are chosen in the expectation of how a receiver will decode them. Receivers decode their receptions, assuming knowledge of how the sender has encoded them. The complementarity of these models thus becomes a requirement of communication = reproduction.

An everyday synonym of decoding is interpretation. We say a text must be interpreted to be understood. Readers translate a text into their own conceptual system, employing conventional rules of interpretation, which amount to using a common code, for example a dictionary, or the published index that enables library users to gain access to its holdings.

The transmission metaphor affords two kinds of cognition, the sharing of the same code, as 'in interpretation, and in the awareness communicators may have of each others' complementary coding practices.

Obviously, the transmission metaphor is not limited to technical or engineering aspects of communication, as some writers have suggested. Interpretation is one counter example. We also speak of transmitting genetic information across generations, diseases through a population, and technology to developing countries.

The War Metaphor

Presumably grounded in the British tradition of public debating comes a metaphor, more associated with talk than with writing or mass communication, that makes communication into a kind of war. Lakoff and Johnson show it to be reflected in a variety of everyday language expressions.

"Your claims are indefensible.
He attacked every weak point in my argument.
His criticisms were right on target."
I demolished his argument.
I've never won an argument with him. Your disagree? Okay, shoot!
If you use that strategy, he'll wipe you out.
He shot down all of my arguments" (1980:4).

The authors continue to describe the entailments of this metaphor, by saying: "It is important to see that we don't just talk about arguments in terms of war. We can actually win or lose arguments. We see the person we are arguing with as an opponent. We attach his positions and we defend our own. We gain and lose ground. We plan and use strategies. If we find a position indefensible, we can abandon it and take a new line of attack. Many of the things we do in arguing are partially structured by the concept of war. Though there is no physical battle, there is a verbal battle, and the structure of an argument - attack, defense, counterattack, etc. reflects this. It is in this sense that the ARGUMENT IS WAR metaphor is one that we live by in this culture; it structures the actions we perform in arguing."

"Try to imagine a culture where arguments are not viewed in terms of war, where no one wins or loses, where there is no sense of attacking or defending, gaining or losing ground. Imagine a culture where an argument is viewed as a dance, the participants are seen as performers, and the goal is to perform in a balanced and aesthetically pleasing way. In such a culture, people would view arguments differently, experience them differently, carry them out differently, and talk about them differently. But we would probably not view them as arguing at all: they would simply be doing something different. It would seem strange even to call what they were doing "arguing."

Perhaps the most neutral way of describing this difference between their culture and ours would be to say that we have a discourse form structured in terms of battle and they have one structured in terms of dance" (1980:4-5).

Obviously, verbal communication and armed conflict are different kinds of human interactions. However, using the war metaphor cannot but set communicators against each other with the implicit aim of establishing who is right, who is stronger or who ends up as the winner. Naturally, the metaphor would work best when there is something to win, like in bargaining for a good price or earning the award in a debating competition. But when there is no obvious criteria for gaining or loosing something, the use of this metaphor creates suitable battle grounds like personal pride, dominance in a relationship, demonstrations of power over Others. All of these may have nothing to do with the issues under discussion and can effectively prevent communicators to solve the problems they may be communicating to.

The Dance-Ritual Metaphor

Speaking about communication scholarship, Carey (1988) suggests that the ritual aspect of communication has largely been put into a residual category, one that remains after its contents are removed and its purposes are explained. For him it is, as it was for McLuhan (McLuhan and Fiore, 1967), the routine of attending to the mass media, the commitment to a daily reading of the newspaper,
or the habitual watching of the games on Sunday, for example. The metaphor of the ritual directs attention to what is invariant in communication: the endlessly repetitive performances not aimed at a practical purpose and the unifying of those involved into a community. And so it is with communication as dance which stresses the harmonious complementarity of movements: ceremoniously asking "how are you" and saying "goodbye," taking turns at talk, the punctuations that mark the progression of legal procedures, regardless of their outcome, and the public ceremonies of political succession.

A good example of the dance-ritual metaphor in action is conversation. Etymologically, conversation comes from the Latin verb "conversari" which means to live, to keep company, to become occupied or engaged, to move around, to which middle English and French seems to have added "to speak." The purpose of being in a conversation is to keep it going.

The dance-ritual metaphor entails, first of all, *continuity and repetitiveness*. In a ritual, authors are unimportant and performers are replaceable, especially when it is transmitted throughout a population or passed on from one generation to the next. In dance, it is the grammar of movement that a choreography describes, not the dancers' names. Conversations too may drift from one topic to another, seamlessly and with ease. What remains constant is the taking of turns at talk, involving all participants into a single community. Living with this metaphor means maintaining the process of mutual engagement. When dance, ritual, and conversation do terminate under appropriate conditions, it is always possible to reproduce them, elsewhere and with different people, as long as participants and audiences recognize the sameness of the process.

A second entailment of the dance-ritual metaphor is that it makes communication a *cooperative and communal* activity. Participants understand their role, contribute their share, and join for everyone else to see and judge. There are all kinds of devices to keep participants within this cooperation. On the one hand, if someone feels ignored, meta-communicating, for example by saying "let me have my turn," may bring him or her back into the routine. On the other hand, the participants in dance or rituals always are accountable to each other and can be made responsible for perceived violations. In conversations, participants may be requested to elaborate on what they said, explain their meanings, or justify their behavior and generally feel obliged to comply with such requests (Shotter, 1984).

A conversation becomes a bad one (or loses the status of a conversation altogether) when it turns into a monologue. when war or control metaphors creep into the process, or when some participants feel put down, incompetent, or excluded. Ackerman gives two reasons that, when entering a dialogue without further grounds, disqualify a conversation as being what he calls (power-) neutral. These are claims by any one participant (a) that his or her conceptions are inherently better than those of Others, and (b) that, regardless of the merits of the conceptions involved, he or she is intrinsically superior to some or all of the other participants (1980: 10-11). Thus conversations can easily turn into debates, arguments or power plays, all of which entail claims to unequal privileges that are incompatible with the metaphor. In dance, ritual, and conversation there are only participants, neither winners or losers nor managers. Even "masters of ceremony" play a role in the ceremony, are part of the ritual, not outside of it.
A third entailment is that communication as dance-ritual is both individually satisfying to all participants (and at no one's expense) and leaves something recognizable behind. It may change the minds of its participants or audiences, in drama for example, affect the surrounding ecology (Rappoport, 1979), create a historical record or discourse that can be examined as long as participants' memory keeps it in order and alive. However, the jointly woven fabric that does arise is every participants' own construction. People don't respond to what is said but to their own understanding of the emerging fabric.

**Constructivist Reflections**

What lessons could be learned from the preceding almost catalogical account of metaphors of communication? One traditional response, and the one objectivists tend to prefer, is to generalize, taking all of these, one could say "folk-theories," to be mere descriptive variations of a single underlying phenomenon and the elements they share to be the generalization sought. I am submitting this to be a rather hopeless aim. Although one can always "find" similarities if one looks for them, most of these metaphors provide evidence for the concurrent existence of vastly different if not incommensurate notions of communication that bear at best Wittgensteinian family resemblances.

Another traditional response, and one that seems even more objectionable to me, would be to dismiss these metaphors as naive accounts or as popular myths of communication that ignorant people believe and enact but qualified scientists must replace by an objective truth. In this vein, one could easily ridicule the container and conduit metaphors, for example, by confronting them with "physical evidence." Indeed, literally, a letter contains nothing. It consists of a paper with unequally distributed light reflecting surface qualities. Everything else is a matter of someone recognizing configurations of characters that say something to him or her. Similarly, there is nothing flowing through copper wires. Electrons merely oscillate or bounce against each other (a common metaphor in physics') in causally determined ways. By analogy, dropping a stone into a pond causes waves that do seem to propagate to its periphery (and back as well) and give rise to the common illusion that something material would be travelling here. But the water, much like the air surrounding a speaker, stays pretty much in place. However, having said this, I see no reason for privileging such physical accounts of communication phenomena on grounds of their claimed objectivity.

Instead of treating metaphors of communication as separate objects, summarizing or drawing general conclusions from statistical accounts of them, let me shift gear here and step one logical level above the metaphors as reviewed, and consider in the following the "social reality" of their apparent multitude.

In the above, I took metaphors as windows into how their users create their understanding of communication. In trying now to understand their variety in use, I am in fact moving from an individual understanding of communication through metaphor to an understanding of this understanding of communication.

This shift is important for it enables an understanding of Others' understanding, including self-understanding, and could therefore be called second-order understanding. First-order understanding can
not embrace self-referential phenomena. Second-order understanding does and thus lies at the root of social phenomena. which I take to be constituted in the understanding participants' have of their involvement with each other. First-order understanding is unable to reflect on human knowledgeable participation in these phenomena. Second-order understanding offers researchers a way of recursively reflecting on their own role in the phenomena of their concern. First-order understanding condemns researchers to the role of unreflexive spectators of a logically flat world.

Following are a set of 13 mini-essays that seek to neither generalize from these metaphors nor dismiss them of hand but try to understand them as what ordinary people, including not so ordinary ones, take to be part of their reality into which communication research needs to inquire.

(1) Reality. Whatever underlies the various phenomena we know as communication, it obviously, can afford many metaphors of communication, many models of communication, many theories of communication. None of these can be claimed to be a superior approximation to what communication "really" is. In fact, it is the variety of metaphors, not generalizations or a universal kind of truth, that tells something about the reality of human communication.

What matters here is that (a) the apparent multitude of available communication metaphors is indeed affordable by the medium of their embodiments, for example, by the people enacting them, the technology realizing them, and the society using them, that (b) metaphors are viable relative to each other, that is, they have survived the discoursive practices that emerge in the process of their simultaneous enactment and that (c) each is coherent within 'possibly quite different constructions of reality. The set of metaphors reviewed in the preceding describes no more than the mode of a wide distribution of latent and possible realizations. I am suggesting that privileging any one theory of communication as the general one, one that subsumes all others, without consent by those theorized therein is likely to lead to an intellectual imperialism of first-order understanding (Krippendorff, 1993). I shall weave these three observations into the following sections.

(2) Cognitive Autonomy. I take it to be axiomatic that individual humans are cognitively autonomous beings. Their understanding of themselves, of the environment they occupy, of the language they speak, and of their communicative involvement with Others always is their own. Nobody can be forced to understand something as intended, as it exists or as it should be. And since nobody can observe someone else's understanding, nobody (except someone who claims god-like observational abilities) will ever know which understanding he or she "shares" with someone else. Also, understanding is never finished. Even in the absence of physical stimulation, people can reconsider, reconstruct, or invent new worlds, including themselves. Cognitive autonomy should not be confused with individualism. In (6) I will address the necessity of its social embeddedness.

How do particular metaphors of communication relate to cognitive autonomy? I already suggested that the container and conduit metaphors, for example, equate understanding with something like sensory exposure to, contact with or consumption of the objective qualities of communication contents. I showed that this rather simple notion of cognition coheres with everyday communication practices (as
understood by its practitioners), justifies the production of 'form reading matter for example, supports
the authority of authors as I have argued, etc., but the understanding of this understanding does escape
their logic. The two metaphors thus exemplify the human ability to construct realities that project the
causes of understanding onto metaphysical entities deemed outside of this understanding and thus
prevent their beholders from realizing the kind of self-reflexivity, cognitively autonomous beings are
capable of. Metaphors of communication offer insights about these disabling constructions.

The multitude of coexisting metaphors of communication clearly demonstrates the availability of
choices among ways of communicating. It also suggests that human communication can be invented,
articulated, and altered by those realizing their cognitive autonomy. Language and especially metaphors
are important in generating such realities (Schon, 1979), including the choices available and constraints
realizable through them. Most everyday metaphors, and, in all fairness, I must add scientific theories of
communication here as well, cannot embrace multiple realities and do not reach the level of
understanding at which cognitive autonomy becomes manifest.

(3) Understanding and practice. It is in the nature of cognition that all knowledgeable beings enact
their knowledge and in turn learn from being constrained consequent to their own practices by an
otherwise unknowable environment. Understanding and practice thereby form an inseparable circular
unity. Let me propose what might well be an axiom of cognition that nobody can knowingly act against
his or her understanding. This circularity converges to a condition in which individuals become
increasingly knowledgeable about their practices, in which their constructions of reality appear
increasingly vindicated and certain, and in which they feel increasingly competent in a particular
practice of life.

However, this implied determinism is qualified by the fundamental asymmetry between the two
components. Understanding is accessible and subject to creative reconstructions by its beholder. The
practices that a particular understanding entails is part of this understanding but it is their unfolding into
a medium that may get knowers into difficulties or cause their understanding to break down. To preserve
their understanding, individuals may then have to invent new constructions of reality, redefine their role
in it, or die from lacking this ability. I contend that new metaphors are the principal source of this
creativity.

In the practice of communication, using a particular metaphor of communication means enacting it and
refining the constructions of oneself and Others it affords. It is in second order understanding that the
awareness of alternative metaphors arises, that alternative practices of living with Others are
considerable, and that cognitive autonomy can be realized.

(4) Viability. As was shown above, rather different metaphors of communication can coexist within
society, to which I now want to add: 'as long as they do not interfere with each other in the practices they imply.'

Two individuals - note that I am talking about my understanding of them - who understand
communication as war will end up arguing all the time, trying to win battles, seeking to put each other down, etc. and the emerging intertwining of communication practices would be quite consistent with the war metaphor both communicate with. In contrast, if one of these individuals subscribes to the control metaphor and the other to the transmission metaphor, for example, they may not be able to stay together for long. While each may start out presuming to know exactly what communication "is," the former naturally imposes his or her purposes on the situation, pursuing various persuasive strategies, treating the latter as a means to his or her ends, and may end up being disappointed in detecting neither rationality nor compliance. The latter will try to figure out the code the former is using, what his or her ideas or intentions actually are, and ends up unable to understand why the former does not appear to be committed to fixed meanings or established truth conditions, comes across as manipulative and seems to be freely lying to serve his or her purposes.

Thus, different metaphors of communication turn out to be either viable or not, but always relative to each other. Non-viability is experienced as a breakdown in understanding. The absence of breakdowns, viability, may be taken as an encouragement to continue communicating within a construction, increasingly accepted as real.

(5) Second-order understanding. Understanding Others' understanding arises in language not independent of it. From merely observing processes of communication one might not be able to detect whether someone is "hard-wired" to respond to physical stimuli much as smart interactive technical devices now do, or to determine how this person realizes his or her cognitive autonomy. Outside observers can test behavioral hypotheses about Others, but without languaging observers may have no clue about what this behavior means to the observed, how it is interpreted, how it is understood. Without languaging one can neither see oneself through the eyes of the Other nor realize the Other in one's own constructions. This is why it is so difficult if not impossible to communicate across species, with dolphins for example, and why an exploration of the use of metaphors in communication is so important in providing a window into one's own understanding of someone else's understanding.

Let me add a self-reflexive note on the above. In analyzing everyday metaphors of communication, I could be read as claiming privileged access to Others' understanding of what is or can only be mine. Indeed, my account of the above metaphors kept me in the role of an outside observer.

To avoid this detached position, I would have to move to a second-order understanding, take Other's cognitive autonomy at least as seriously as my own, and get interactively involved with those I wish to understand. In attempting this, I always risk my understanding to break down. To avoid such risks, I could walk away from the scene, withdrew, and thereby protect my understanding. But, I could also express my breakdown and actively inquire about the Other's understanding, the Other's understanding of my understanding, etc. and respond to similar questions concerning my understanding of those asking me. Here, I find myself no longer merely observing but participating in second-order understanding. The question then arises: which metaphor might aid understanding my involvement? Traditional researchers mostly opt for control metaphors, defining their task as one of constructing theories that predict and control and maintaining the social distance between themselves and their subjects. As this metaphor can neither respect the cognitive autonomy of those observed and theorized nor reduce the gap between
observer and observed, I prefer to realize the shift towards more equal participation, from first-order to second-order understanding, and from communication to meta-communication within the dance-ritual metaphor. It encourages community and respect and brings forth the coordination of communication practices and the coordination of their coordination in which languaging is indispensable. I have no other justification for this preference than that I can live with this metaphor of communication, at least until proven otherwise, and I presume Others can as well.

(6) Social communication. The attribute "social" is often rather carelessly applied to all kinds of super-individual constructions. To avoid slippage into the paradoxes of objectivism, which thrives on literal or operational accounts of "a reality conceived of as independent of anyone conceiving it," let me suppose that all social phenomena are constituted in the understanding participants have of them. To illustrate, I would argue, that there can be no language without speakers understanding its expressions (in their own terms, of course). There can also be no family without members feeling part of it. Crimes are crimes because people understand them as such. The constitutive role of participants' understanding is central to these examples. That any theory of phenomena that are constituted in the knowledge participants have of then can not ignore, bypass or dismiss this knowledge has been stated repeatedly (Berger & Luckmann. 1966:65-1 Giddens, 1990:38; Krippendorff, 1993). While this seems obvious, the second order understanding this requires is rarely, practiced, however.

I have argued that container and conduit metaphors derive from technologies and provide no place for human understanding and that the notions of cognition entailed by control and war metaphors are entirely one-sided ones. Their notion of communication is not social by the above contention. Although the transmission and dance-ritual metaphors entail certain complementarities of understanding communication, they do not afford an understanding of the these metaphors.

Let me then propose that communication becomes a social phenomenon precisely when its participants recognize or construct in their understanding of communication the understanding of communication of those they communicate with, when their communication theory recursively embeds the communication theories of Others, and when the participating communicators are thereby enabled to see themselves through the eyes of Others.

I began an account of the intertwining of communication practices in (4) above, when pairing my understanding of different individuals' understanding of communication as inferred from the metaphors they live with. However, I described their unfolding not as a participant. External observers or analysts can not bring their understanding of communication into braided practices with Others. This prevents those theorized to inquire into the metaphors their observers are exploring with them and thus excludes the observation of social phenomena from being a social phenomenon as well.

To not merely describe or explain communication as a social phenomenon, but moreover to realize the study of communication as a social phenomenon means becoming communicatively involved, accounting for the second-order understanding of this involvement, and reentering these accounts (theories) into the very process of communication to be understood. Here the choice of appropriate metaphors is crucial.
and this leads me to suggest conversation as the prototype for such reflexive inquiries.

(7) Larger constructions. Obviously, metaphors occur in discourses that in turn, perhaps less obviously so, bring forth larger social realities. Discourses can be thought to be collective and ever growing inventions not realizable individually, but understandable by each participant and in their own terms. Metaphors of communication therefore may not be divorced from the larger contexts of individual world constructions they help to negotiate and become in turn constrained by. The social construction of social institutions - from the family to the state - of nature - from everyday physics to cosmology - and even of individual humans from psychological to social theories of identity - all can provide suitable contexts in which communication can be placed to make sense different senses I might add. The fact that the control metaphor has been adopted as a modus operandi in rational bureaucratic organizations, has thrived in them, and managed to define them in return, exemplifies its embeddedness. Next to social institutions, such constructions as culture, ideology, hegemony, and various-isms are frequently relied upon super-individual invention. I will limit my attention to the construction of the mass media of communication, but want to sketch two further issues en route to it.

(8) Three positions. From my point of view, all knowledge includes its knower. Perhaps I should say "should" because people frequently deny or forget that they are part of the world they know. Natural and behavioral scientists, for example, tend to assume a gods-eye view of their world and do not realize their participation in it. To avoid such disabling world constructions is especially important in understanding human communication which can, as I have argued, hardly take place without communicators knowing of each other. I am distinguishing here three kinds of knowers by the position they take within their known: subjects, poets and beings or better becomings.

Subjects construct themselves as subordinate parts of larger wholes, as subordinate members of social organizations, society, a universe (including its rulers or gods) whose existence they can not question, whose rules and laws they feel obliged to uncover and obey, and whose purposes they believe must be served. By systematically denying their participation in the ontogenesis of such super-individual, supernatural, extra-individual, or metaphysical entities, subjects prevent themselves from developing a vocabulary for realizing their own cognitive autonomy and are led instead to project onto their own constructions the very powers to which they can not but subject themselves. Subjects typically hold remarkably elaborate theories of the overwhelming nature of these entities and this includes communication as a compelling force. Thus, through communication, these realities assert themselves and demand appropriate attention and responses.

I am primarily concerned here with subjects but will describe the other positions for contrast.

Poets see themselves as creatively involved in the realities they occupy. They are aware that their own linguistic inventions, such- as the construction of metaphors, can decisively intervene in human affairs and direct the social practices of living with everyone else. For poets, communication is engagement in the continuous reconstruction of social realities.
Becomings could be called auto-poets or self-creating beings for they are willing to reconstruct themselves as well. Becomings realize their cognitive autonomy in continually constructing, deconstructing, and reconstructing realities that constitutively involve (and hence recursively embed) the cognitive autonomy of Others. For becomings, communication is continuous cognitive growth, emancipation.

The container and conduit metaphors of communication clearly make their users into subjects. Their logic does not permit any freedom of interpretation. The transmission metaphor is similarly limiting in putting senders in charge of what the receivers of communications must reproduce. Here, messages, texts, or objects of perception always are regarded as the determinants of what is to become known or "acquired."

In the control metaphor, controllers undoubtedly assume the role of masters of a portion of their world which includes the subjects targeted by their communications. This does not imply freedom, however. For this metaphor to work, both controllers and controlled have to submit themselves to the very rationality that maintains the inequality of power. The poet, in contrast, would be able to question, reconstruct, and replace this rationality. The becomer might abandon it in favour of an aesthetics.

The dance-ritual metaphor is largely neutral regarding particular rationalities or power relationships, although the coordination it entails calls for participants to play well understood roles relative to each other. A chorus requires singers. In more complex rituals, such as a wedding ceremony, participants play rather different parts. Thus, participation in rituals may not be equal, but certainly is equally indispensible. The dance-ritual metaphor of communication can afford all three positions, conversation, and second-order understanding.

(9) Three constructivist theories of human communication. The three positions individuals may take within their larger constructions of reality also distinguish three epistemologically different approaches to human communication theory construction. By human communication theory I do not mean theories that merely elaborate on, formalize, or refine one particular metaphor of communication, information theory or cognitive dissonance theory for example, but theories that account for choices among conceivable communication constructions and the creation and use of metaphors of communication in everyday life. Such theories can not but respect the understanding of the communicators they claim to describe and must, in other words, be social theories that are capable of recursively embedding themselves in the theories of Others. I am proposing that:

From the position of a becoming, communication theory takes the form of a theory of communicative emancipation, that is, a theory that accounts for how individuals maintain or expand their cognitive autonomy in the face of possible social-entrapments and challenges from the medium of their embodiment while communicating with Others whose cognitive autonomy is respected as well. This is a theory of joint emancipation (see Krippendorff, 1991).

In theorizing the position of a poet, communication theory becomes a theory of communicative
that is a theory of how individuals manage to coordinate their lives relative to each other, how the discourse they collectively create comes to be embodied in language, technology, social institutions, culture or any kind of socially constructed reality, - not as overwhelming super-individual entities, but as jointly invented, constructed, reproduced, and maintained forms - and how these, under conditions of breakdown, can be overcome. It is a theory of the co- and reconstruction of media or discourse.

Concerning subjects, communication theory becomes a theory of communicative authority, which accounts for the conditions under which individuals objectify and then subordinate themselves to their own constructions of reality. Such a theory can not merely explicate the control metaphor, for example, by searching for objective sources of power, or uncovering the prevailing rationality for compliance. From a constructivist perspective, theories of communicative authority would have to explain how discourse reifies oppressive super-individual constructions, which practices legitimize powerful authorities, what kind of realities compel people into action by arguments deemed forceful, or where the need to accommodate a universe constructed as observer-independent come from.

These are researchable questions. However, the awareness of the very act of creating in discourse a theory that explains how individuals relinquish their cognitive autonomy to external agents also entails a shift from the position of a subject to that of a poet. Thus, a constructivist perspective carries an implicit moment of liberation.

In the domain of mass communication, a theory of communicative authority may explain, for example, how and in whose constructions of reality journalists, experts, politicians, entertainers, and scientists acquire the influence they enjoy in public, how and in which constructions of reality one medium of communication comes to be held more valid, compelling, reliable and hence more trusted than another, and how and why some constructions of reality develop immunities to doubt or become more resistant to critical examination or reconstruction than others. Questions of this nature cannot be answered by causal theories. Rather, they require theories that account for human communication practices, including the very ability of re-constructing such theories from existing ones and embedding them in the recursivity of human understanding. This is the same circularity through which the institution of mass communication is constituted and its authority becomes legitimized. I shall sketch three facets of this theory.

(10) Self-authorization. As social institution, the mass media of communication constitute themselves in the very social realities they create to thrive in. This fact may not be unique to them. For example, the institution of law brings forth both law enforcement agents and the criminals it pledges to bring to trial. The institution of education continuously reproduces teachers, school administrators and the students it seeks to prepare to knowledgeably function in society. The institution of the military creates the very conditions for war it is designed to fight, etc. All institutions rely on communication practices that perpetuate their social construction in the cognition of their (inside or outside) participants.

What makes the mass media different from other institutions is that they define themselves as communicating about all publicly relevant social realities including about those in which other
institutions try to constitute themselves. In the guise of merely representing reality as it is, they actively participate in creating these realities in the public's eyes, provide the frames for individual participation in them, and therefore are far more monopolistic, self-directing and central in society than any other social institution can be. More than any other social institution, the mass media author themselves.

(11) **Impoverishing communication.** As an institution, the mass media maintain themselves in the constructions individuals have of them as authorities on "everything that's fit to print," to show, or to be discussed and this includes the operation of the mass media themselves. All institutions require and hence encourage suitable discourses and discourage if not suppress opposing ones. Among the more drastic examples of the latter is the suppression of free speech, entrepreneurship, and immigration by totalitarian regimes that would otherwise and have recently be shown to break down indeed if such practices were to become common. Less drastic but similarly effective is the fact that of the multitude of possible metaphors of communication, the mass media practice and promote primarily three kinds. The control metaphor is clearly evident in their internal operations: measuring communication by desired effects, cancelling shows that do not bring sufficient advertising revenues, segmenting audiences into markets, seeking to improve predictability of recipient responses, etc. This contrasts sharply with the metaphors of communication used in and for the public. These are primarily the container and conduit metaphors. They emphasize the production, dissemination and near universal accessibility of contents and require of its mass audiences no particular cognitive skills. As elaborated above, they also depict understanding as obvious, instantaneous, and effortlessly entertaining and thereby suppress an understanding of this understanding. Such metaphors seem to be promoted by the sheer frequency of linguistic and communicative experiences. The members of the mass media audiences, adopting these metaphors as their own, increasingly surrender to media authorities, becoming more and more addicted, dependent, predictable, and hence controllable members of the mass media culture.

Whether the multitude of metaphors of communication that lie outside those practiced by the mass media are actively ignored or merely absent for technical reasons, it is this selectivity in which the authority of the mass media is maintained. For example, transmission metaphors, which could encourage its users to be concerned with what went on behind the TV screen, might lead audience members to explore the hidden interests and powers governing the operation of the media, or enable them to reflect on their own complicity in the media's increasing role in their everyday life. The wide spread practice of such inquiries would clearly undermine the very authority of the mass media that corporate interests seek to maintain. Indeed, most efforts to create citizen awareness of mass communication have failed largely because of the overwhelming presence of seductively simple metaphors of communication. Unfortunately, critical studies of the mass media often thrive on the very same repertoire of metaphors the media promote and therefore cannot reflect on their own critiques through them. Relying on the "existence" of power in explanations of the institutional pervasiveness or dominance actually creates the rational for submission to the same kind of authority that these critiques seek to criticize. The selective promotion of metaphors of communication is also aided by preferred technologies of communication. For example, conversations can hardly grow in the one-way communication technology that the mass media have identified as their most effective means. In contrast, if not in opposition to the frequency of mass media metaphors, recent interactive computer networks support conversations and the construction of participants (poets) in these [virtual, cyberspace, or multiple user dragon (MUD)] social networks.
These seriously challenge and undermine the mass media's hegemony, albeit in still small circles of participants.

Thus, the mass media establish themselves and their authority in the metaphors of communication they selectively promote. The repertoire of communication practices that do survive the selective process and are in fact in public use, predominantly are the individually disabling ones.

(12) Surrender of cognitive autonomy. The above leads one to say that, as a social institution, the mass media of communication constitute themselves at the expense of their participants' cognitive autonomy. Again, this phenomenon is hardly unique to the mass media. Probably all super-individual constructions demand from their human constituents submission to the requirements of their social existence. The state, religious organizations, social movements, and ideologies are obvious exemplars. But even such apparently insignificant linguistic acts as granting agency to culture, power to social hierarchies, nature to individuals' racial identity, or observer-independent existence to a universe prevents individuals from assuming participatory roles in their worlds and makes them into obedient subjects.

What makes the mass media unique among these super-individual constructions is

(i) Their impressive ability to effectively coordinate a vast social network of experts, journalists, politicians, popular entertainers and scientists, whose discourses become privileged by their very appearance in the mass media.

(ii) Their unchallenged claim to provide audiences with vicarious access to an objective reality. This is a reality the mass media are in fact in the business of creating, disseminating and re-observing in their own institutional terms, a reality that masses of participants construct from the messages, metaphors, and perturbations they experience, and a reality that, thanks to the predominant use of container metaphors, renders messages, language, technology, and institutional commitments largely transparent or unnoticed. Journalists are not exempt from believing that they report facts as accurately and truthfully as possible while on the long run merely reproducing an institution that makes society see itself but only through its own infrastructure.

(iii) The increasing public attention to and dependence on the mass media by large anonymous publics, corporations, religious and civic organizations, in fact, nearly every member of society, in whatever capacity, including those employed by the mass media industry, is taken as evidence of an overwhelming consensus regarding mass media's public purposes and practices, a consensus from which single individuals or even small groups of concerned critics see themselves as more and more unable to deviate without incurring considerable social costs.

In effect, the reality in which the mass media operate conveniently relieves its participants from the responsibility for their constructions and subjects them to the complex authority circumscribed by the above three characteristics. This amounts to a large scale and increasingly irreversible surrender of
cognitive autonomy to super-individual constructions. Although this cognitive disablement seems to be characteristic of the public domain, I contend that it affects private, professional, and scientific domains as well.

(13) Communication Research might be more a product of the mass media's construction of realities than its scientific practitioners are willing or able to admit. Indeed, the dominant definitions, models and theories in communication research are derived largely from container and conduit metaphors in the public and interpersonal spheres and from the control metaphor in the organizational and managerial spheres. In the first instance this spurns a whole spectrum of intellectual activities, from cultural criticism to scientific research, all of which claim to authoritatively extract the contents, ideas', and information provided by the mass media or individual messages as containers and analyze their objective nature, flows and effects without reflection on the recipients' (including the social scientists') understanding of their involvement in the process. This approach to communication research is enshrined in Lasswell's famous formula: "who, says what, in which channel, to whom, with what effect" (1948). It stereotypically analyses transportation, contact, effects and not much more. In the second instance this encourages research that focuses on the (independent or) manipulable causes of controllable (or dependent) communication variables. Even some critical scholars, seeking to assess media biases or to uncover underlying power structures, ideologies or hegemonic interests tend to subscribe, to the same determinism that control efforts require, unwittingly supporting the very logic they criticize.

The situation is not quite so hopeless, however. Alternative approaches to communication research are surfacing indeed. There is a shift away from research into effects to research into agenda setting (Shaw and McCombs, 1977) or various forms of framing (Gitlin, 1979- Rachlin, 1988). There is a shift from explaining audience behavior as mass media or message driven to explaining it in these audiences' own terms, for example in the uses and gratification approach (Katz et al. 1974) or by focusing on information seeking behaviors (Donohew and Tipton, 1973). There are recent efforts to link the idea of construction to the structure of the mass media operation (e.g. Tuchman, 1974). There is a renewed concern with language (Edelman, 1964, 1977), ethnography (Agar, 1986), naturalistic observations (Lincoln and Guba, 1985) and discourse (Dijk, 1985).

Closer to philosophy, there is the shift from objectivism to experientialism (Lakoff & Johnson, 1980), social constructivism (Gergen, 1985), radical constructivism (Glasersfeld, 1984, 1991; Segal, 1986; Watzlawick, 1984), and ecological systems theory (Luhmann, 1989). There are efforts to radically reorient epistemology (Rorty, 1989; Maturana and Varela, 1988). There is the turn toward postmodernism which, while often eroding into a semiotic enterprise, severely attacks the rational consensus on hierarchical forms of thinking and organization and the hegemony of grand theory in which people found no place to breathe. Much social (and sociological) knowledge remains to be reformulated to achieve an understanding of human communication in human terms - which always entails a second-order understanding.
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