

# A Heretic Communication About Communication About Communication About Reality

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Thank you for the trust expressed in inviting me to this celebration. I am particularly honored to speak as a graduate of the communication program and hope it is not presumptuous of me to add the thanks of many alumni to my personal appreciation for having here developed visions of professional possibilities and means to pursue them.

I want to talk about epistemology, the epistemology of communication research. I firmly believe that the awareness of how we come to know lies at the root of understanding communication and should inform communication research as well.

Traditionally we were taught in what I now call the orthodox tradition.<sup>1</sup> In this tradition we take for granted and even insist that communication always is about something: ideas, events, vicarious experiences or problems of interpersonal or social significance. Communication research inquires into that communication and the orthodox approach must additionally separate the object from the process of inquiry by the very same logic. Consequently, the publication of findings and theories by communication researchers is communication among social scientists about communication among people about their world. And this would make my epistemological concern "communication about communication about communication about reality," hence the title of this talk.

This three-level remoteness from reality is not a mere trivial play with words. I am suggesting here that this orthodox view of communication entails an epistemological trap which artificially separates the observer from the observed, creates oppressive authority structures and prevents us from getting critically involved with our own realities.

I am anticipating that many students and scholars of communication, included in this audience, will find such claims difficult to accept or even heretical. But I am not dismayed, for my etymological dictionary shows the Greek root of the word "*heretic*" to describe someone capable of seeing options, willing to act and to take responsibilities in the face of an orthodoxy that is either blind or prohibits such paths to be explored. I feel comfortable enough with this sense to invite you on a dangerously enlightening journey through a small part of the land of communication, its construction in discourse and the possibilities it has in its womb.

In order that you may not get lost on this journey, let me sketch a rough map of how I will proceed.

Firstly, I shall explain my methodology or build a platform for you to stand on during this journey.

Secondly, with this in mind, I want to lead you to encounter two exemplars of constructing communication, communication as sharing

and communication as control, and explore with you some of their cognitive, interactive and institutional implications.

Thirdly, I shall invite you to take a bird's eye view of what we will then have seen along the path so far taken and from this position suggest what might be the most spectacular features of communication yet to be explored.

Finally, I shall recommend to you how communication research might be practiced and useful in the future, leaving you to find your own way through the remaining territory.

As proposed, I will start with some comments on "methodology" (in quotation marks).

## Metaphor

Surely we can agree that we engage each other in communication through language, whether in the process of research or in everyday life. My talk is embedded in language as well and in the same language in fact. In contrast with the orthodox view of language as descriptive or representative of something, I have come to be convinced by another view of language that takes its interactive use or discourse as its principal function. I don't want to drop names or review variations on this theme, but take just one very old concept that has recently been revitalized in this not so old view of language and cognition and this is metaphor.

I have to remind you that in the orthodox tradition metaphors are considered illogical figures of speech and most scientists who might enjoy metaphors in poetry ban them from scientific discourse for fear of the ambiguity and confusion of reference they might cause. In contrast, I found metaphors to be more revealing than "straight" or literal talk and seem to be in agreement on this with several anthropologists and linguists, most recently with George Lakoff.<sup>2</sup>

Because of obviously diverging attitudes towards metaphors, let me demonstrate how I will employ the notion here on a perhaps worn-out example. Consider the rather ordinary expression:

"head of the household."

It fuses two separate semantic domains: that of living organisms and that of a family living under one roof. Now, we know that households have members and so do organ-

isms and there is therefore some minimal correspondence between the two domains. But in the biological world the head is a special kind of member. It houses the brain. It is where decisions are made. And removing an organism's head leaves the remainder unable to function. Applied to a family, as it were, this organismic metaphor structures that family consistent with how we believe organisms work and by designating one member as its head makes that member the most important one, the only one that counts, the only one in charge and on whom all others depend. Unlike analogies which merely claim resemblances, metaphors actively organize the domain of experience to which they are applied.

Metaphors are most affective when they fill a void in understanding something new or something difficult to grasp. In accomplishing such feats, metaphors do not simply explain poetically or provide a fancy understanding of something else; I maintain that they are the very manifestations of that understanding. After accepting an innocent phrase like "head of the household," the family simply can no longer be what it may have been before. It is now experienced through this metaphor. In other words, metaphors supply the very pattern of organization we now see for a fact.

In the orthodox tradition, it is difficult to operationally define metaphor and those in this tradition who tried either failed or rendered it as some kind of inconclusive analogy. In contrast, it is easy not only to give examples for metaphors, as I have done, but also to suggest metaphors of metaphor. The expression:

"metaphors are paraphrases (of experiences)" may serve this purpose. Whether it condenses what I have been saying about metaphor so far is for you to decide. But, the very possibility of a metaphor of metaphor suggests to me that understanding metaphors presupposes metaphorical understanding, and points to the circularity of a cognitive universal that escapes literal discourse, is inaccessible from a reality outside cognition, and cannot be described from a meta-language above language.<sup>3</sup>

I find the metaphorical structuring of unfamiliar, unstructured or "ill-structured" experiences and its fundamentally self-contained understanding quite remarkable.

Herbert Schiller's presentation will appear in his forthcoming, *Culture Inc.: The Public Takeover of Public Expression* (Oxford). Percy Tannenbaum's health has prohibited preparing his material for publication.

But to me most important are the entailments that metaphors can piggyback with such structural transfers from one domain to another. If one conceives a family to have a head, one would not want to interview or interact with any of its feet or care about the opinions held by dependents, including a spouse, all of whom must then be inferior to and less informed than the head. Such entailments may not be logically deducible, as the orthodox view may require, but are not entirely unpredictable either.

For example, a student of mine, Karin Wilkins, looked into metaphors for the world population in public discourse. It turned out, using the metaphor of a time bomb was inevitably followed by expressions of urgency and proposals to "diffuse the explosive situation," whereas using the metaphor of a boat entailed and subsequently resulted in concerns expressed for coping with "scarce resources" and "preventing squeezing us to death."

Similarly, Donald Schon compared the public policy entailments of alternative metaphors used in descriptions of a particular slum area in Boston. The use of medical metaphors, characterizing it as a "diseased and crime infested area," entailed treating it from the outside by forcefully removing what is "deceased," isolating infectious elements," and so forth, whereas the use of anthropological metaphors, characterizing it as a "supportive community of impoverished people," entailed making material resources available for improvements decided upon inside that community.<sup>4</sup>

Acting on such entailments—whether by interviewing the head of a household, proposing a diffusion of the time bomb or removing cancerous growths—reifies the metaphors and makes the paraphrase and the paraphrased experientially, interactionally and institutionally indistinguishable. No wonder why the orthodox, whose view of language requires the independence of description and described, is allergic to metaphors that fuse or, as the orthodox might say, confuse these levels.

To conclude what I want to say about methodology, I consider the occurrence of entailments as validating incidences for the working of a metaphor and their coherence with the metaphor as a basis for their connection. In fact, the orthodox insistence on confirming predictions that logically follow from a model or theory may not be so different except for the ontological assumptions the orthodox approach implies and mine does not.

With this somewhat lengthy explanation but minimal vocabulary, I want to examine the two exemplars: communication as sharing and communication as control.

### Communication as Sharing

Communication as sharing is invoked by claiming the word communication to be a relative of communion, of

community, of commonality, denoting things in common. It consists of a cluster of at least three mutually supporting metaphors:

The first might be called the messages are containers metaphor. We<sup>5</sup> ask for the meaning a poem has, we inquire what is in a letter, what someone got out of a lecture or complain that someone is reading something into the message that isn't there. Even more literally, we analyze the content of television, judge a sentence as meaningful or full of meaning, declare a paper to be crammed with ideas or claim there wasn't anything new in it at all. Similarly, engineers speak about signals carrying information and noise. All of these phrases depict linguistic expressions, pictures, electronic signals as containers of meanings, ideas or things that are put into that container and may later be taken out.

A corollary of the container metaphor is that messages, information and contents are entities of a particular kind. We get something out of a show. We receive pieces of news or items of information. We believe someone told half of the story. We post such tangible things as signs at appropriate places. In content analysis we categorize units of content not much different from how a geologist might sort stones into boxes, except for differences in labels. Even so, symbols are thought of as established by conventions and stones are natural; the distinction reveals both as tangible entities. The difference in the two kinds of objects presumably lies in who made them.

When messages and contents are conceived as entities, it is only natural to see communication as a conduit. We convey messages through a channel much like we force water to flow through a hose. We may not get a message across, whether due to gatekeepers, bottlenecks, blocks, filters, or depressions, all terms which come from hydraulics. And when we wonder how long it takes for a legislation to take effect we refer to long pipelines through the administration. In fact the military still equates communication with transportation which entails shipping some material entity from one place to another.

To me it always is remarkable how little this metaphorical complex of containers, entities and conduits entails about communicators, senders or receivers, or to what the participants in communication are reduced. Naturally, since messages are containers, when two people serve themselves content from the same container they are then sharing their content whether this sharing takes place between a sender who has put the content in and a receiver who has taken that content out, or between multiple receivers of the same message, as mass communication audiences are presumed to do.<sup>6</sup>

The image of two partly overlapping circles, the famous Venn-diagram, is widely used as a visual metaphor to

differentiate what is shared and what is not, who is in and who is out, the intersection being reserved for the aim, the result and the value of communication. Sharing is accomplished simply by contact similar to an infectious disease or to attaching a label, which is, I believe, deeply rooted in religion where the ritual of drinking wine from the same chalice or smoking from the same pipe is enough to establish sharing.

You may think that this notion of communication is archaic or belongs to a naive folk theory, one that reasonable scientists would discount. But this is far from so. Much of linguistics, sociology, cultural studies and communication research takes cognitive sharing, that is, having the same or similar pictures of the world, experiencing the same economic conditions, using the same rules of language, interpreting text in the same manner or simply thinking alike, as the self-evident ground on which theories of human communication flourish. What is outside the intersection of a Venn-diagram contributes little to defining speech communities, social classes, the unity of culture and what communication supposedly does, and is therefore either ignored as theoretically irrelevant subjectivity, individuality, and so forth, or branded as deviance.

For communication research, the near dispensibility of people entailed by the container metaphor and the treatment of messages, symbols, content and meanings as entities of a particular kind has proven enormously productive. I already mentioned content analysis which many researchers see as a reliable method to obtain interpreter-independent accounts of what a body of text objectively contains.<sup>7</sup> I could add semiotics with its detailed classification of signs, also without reference to users' cognition. Even when communication researchers ask members of TV audiences whether they had seen a particular show or how many hours a day they watched, underlying these questions is the simple premise that exposure to the same thing causes sharing; hence, container, content and conduit is all that is worth studying. I could elaborate on the use of the industrial production metaphor which is widely applied to account for how the mass communication industry populates its vast markets with identical products and causes widespread sharing. It paints communication research as a discipline concerned with the industrial production of vehicles, contents, markets and consumer effects. I could speak of the appropriation of traditional economics in communication research that ends up being used for analyzing the distribution of movies, TV programs, station ownerships in the world as if they were hard objects; or of econometrics that adds information as another kind of commodity to its input-output tables. Political economists of communication often buy into the same conception by treating their domain of investigation as consisting of material entities, by asking

"who gets what, when and how." I could point to the use of statistical terms like mode, median, average or mainstream which formalize and objectify an implicit notion of sharing at the expense of the tails of statistical distributions, and in either case reduce communication to some kind of exposure and assign the people involved in communication to complex Venn-diagrams.

I believe, the productivity of much of communication research is rooted in the coherence of the metaphors just described (or what they render communication to be) and the methodology and practice of theory construction in the natural sciences. Even though their respective terms may differ, their grammar does not and I maintain that together they conspire in studying communication as a matter of physical contact with containers whose tangible contents are consumed by trivial organisms that can hardly ask questions much less creatively participate in the process.

There may be several of you who might think "so what," and argue "success is all that counts" and "40 years of an Institute of Communication Research is living proof of social usefulness." I even agree to some extent. But the costs for this success may be less than flattering. To show this I want to go one step further and talk about what is to me the most important entailment of the metaphorical complex of sharing. I am suggesting that it invites and nourishes and hence cannot be separated from the institution of authority, an authority that is constitutively oppressive.

Let me start with messages as containers of entities. Entities must be able to exist independent of a receiver else they could not be shipped to someone. Therefore, the entities thus communicated belong to an observer-independent objective reality. In the orthodox tradition, observation means identifying what an entity objectively is and the notion of a universe admits only one interpretation. Indeed, we unquestioningly speak of the content of a book as if there were only one way of reading it, or of the linguistically correct interpretation of a sentence as if every literate person would share this understanding, and we might even consult a dictionary to make the point. Only magicians could pour wine and tea out of the same bottle and we dismiss their skill as a trick. The naive "physics" entailed by the metaphor of communication as sharing does not provide for this possibility. And yet, the experiences of well justified differences in perceiving, in understanding and in knowing what something is, means, or what someone had in mind, abound. Such differences are expected and can be experienced all the time in our everyday communication and in communication research as well. How could they be explained or handled while maintaining the metaphor of communication as sharing? I am suggesting there are three normal responses; all of them I think are basically inhumane.

Firstly, differences may be dismissed as errors, pathological, devious misconduct or mere entertainment. We dismiss them as errors when we can trace differences to inabilities, accidents or involuntary happenings. We dismiss them as pathological when we can explain them in terms of unfortunate conditions like that of schizophrenics who can not help but express themselves in characteristically deviant ways. We dismiss them as devious misconduct when we have reasons to believe ulterior motives account for them, like the calculated ambiguities in political election campaigns or simply lies. Finally we dismiss them as entertaining curiosities when we can discount their reality, like the paradoxes that amused logicians for two thousand years until Whitehead and Russell's theory of logical types ruled them completely out of existence and meaningless.

Note that all of these dismissals presuppose and are entirely based on assuming the authority to do so. Those who can dismiss what others get from their messages must be free of errors themselves else the errors others make would be confounded and not be recognizable as such. They must have access to objective norms else pathologies could not be judged. They must have superior knowledge about others' true motives else devious misconduct could not be established. And above all, they must have privileged access to an objective reality else magicians, paradoxes, and if you want to add metaphors, could not be ruled out of the domain of the scientific, the objective and the real. Needless to say, the dismissed one is left with no cognitive autonomy at all.

This metaphorical entailment alone is astounding but let me add the other two.

Secondly, differences that can't be dismissed may be submitted for mediation to another authority. This authority may be a distinguished person, an institutionalized procedure or both. When we ask a speaker to clarify what he or she said, we attribute this authority to the originator. In fact, a whole rhetorical tradition makes a speaker's intentions the ruler over what a correct interpretation is, and I have actually no qualms about this when discourse is possible. But when authors cannot mediate between different readings, there always are authorities, experts, rulers, judges, who are either invited or eager to impose their legitimate authority on such situations. Professors enjoy the privilege of institutional authority in grading students on what is relevant and how reality is to be interpreted. Scientific procedures too confer institutional authority on facts that non-scientists may not doubt for fear of the inevitable ridicule this would entail. But probably the most important institutional authority is the legal system. The interaction among lawyers, judges, law enforcers, etc. is designed to channel and mediate controversies that inevitably consist of conflicting interpretations of what the relevant facts are and

whose solution is to be considered fair. By design, a court always dismisses all but one version.

Thirdly, differences that can be neither dismissed nor resolved by mediation yield physical violence. Most physical violence in the United States occurs not on the streets, as television tries to make us believe, but in homes. And violence in families rarely is about food, love or children but about who is right and who has the authority to decide on the interpretation the others must accept as true. Also international conflicts are embedded in language, with one side claiming to be correct, honorable, historically justified and blaming the other for their unwillingness to share this one interpretation. I do not want to give the impression of believing that all violence is solely based on language, but that much of it is evidence of the sharing metaphor at work in situations in which it doesn't fit.

Some critical scholars discuss violence in terms of power and ideology. But I find the use of this physical metaphor disabling and not particularly helpful when we are already deceiving ourselves by widely using the metaphor of sharing what creates authority above people and has no respect for the autonomy of human cognition either.

To summarize: when the "communication is sharing" metaphor permeates a discourse, differences in interpretation call for authorities to resolve them and where such calls are heard, institutional hierarchies inevitably follow, and when institutions thrive on something, they naturally promote it.

#### Communication as control

In the West, perhaps more so in the United States than in Europe, another important metaphor for communication reigns as well. I shall call it the control metaphor. It too comprises a coherent complex of minor metaphors.

Communication is a tool to get things done from a distance is one of its manifestations. We hear supporting evidence for it everywhere. If someone concludes a conversation by saying "I am obviously not communicating with you," this can hardly be taken to refer to what is said but to its effects. "I can't get through to you," "you are not listening," "you don't want to understand," and so forth, suggest much the same. It expresses an annoyance that the other isn't accepting or doing what the speaker wanted, that the desired effect is not forthcoming.

Communication is a cause is a corollary of this metaphor. "His letter made me happy," "the red signal caused him to stop," "the TV ad affected her smoking habits," "Hollywood movies create an unreal image of the U.S.," are some of its instances. Indeed, only if communication can be said to be the cause of something else can it be used for control. The whole communication industry is obviously built on this conception. If a show does not bring the projected audiences, it fails as a means to earn expected

cash. If an ad does not make the right people buy the product as advertised it hasn't communicated. Unintended consequences do not count. One speaks of powerful messages, potent communications and strong appeals as if that power resided in the "thing" communicated rather than in speakers or listeners.

Since the achievement of desired effects is used to judge whether something was or wasn't communicated, the control metaphor entails little about content, meaning and understanding except as a means to get someone or something to behave appropriately.

I might add that Shannon's *Mathematical Theory of Communication*<sup>8</sup> and the whole information processing approach to communication that evolved from it are consistent with this metaphor except for the intentionality and reproductibility criteria any control theory requires, but Shannon's theory does not support.

The control metaphor is of course the backbone of western notions of rationality which hold that actors' decision-making is conscious, involves complex premises, requires creativity, intelligence, information, and so forth, and is geared towards external goals, whereas the ideal tool is a perfectly predictable and obedient servant of its master's intentions. Accordingly, and quite unlike the metaphor of sharing, the control metaphor does indeed entail particular roles for the communicators involved but assigns them rather asymmetrically. Consciousness, intentions, knowledge and actions belong to the domain of the privileged senders, performers and creators of messages. Passivity of response and unconscious habits belong to the less privileged class of receivers, addressees and audience members of a communication process, all of whom are expected to follow instructions, display desirable effects and are in that sense the somewhat unreliable and potentially replaceable extensions of highly sophisticated and reliable communication technology.

A large section of communication research has thrived on the control metaphor by circumstantial complicity with the industry's need to render audience members predictable. Even the most widely published definitions of mass communication depict its audiences as large in numbers, anonymous and passive. Whether they are is settled not by empirical investigations but by the fait accompli of a priori definitions. Indeed with control notions in mind, this audience conception is extremely convenient for at least two reasons. It provides the methodological justification for applying simple statistical tools for analysis, and the paradigmatic justification for ignoring the complications arising out of the possibility that audience members create their own meanings and uses for the communications they receive by focussing on the immediacy of easily measurable behavioral effects. (For counter examples see the uses and gratification approach to communication and historical

research.). Explanations of communication processes in terms of effects are not limited to research on current media. Whenever a new communication technology comes up, whether cable, satellites or computers, communication researchers are neither involved in these creations nor do they ask why such technology should be implemented in the first place but turn up in large numbers to study their impacts, thus providing convenient knowledge for further implementation and deeper penetration. Behaviorist theory and methodology are particularly responsible for rendering people as merely responsive input-output devices without a mind of their own and thus supplying the industry with trivialized machines, consumers or tools to realize its commercial aims. It is truly amazing how many communication researchers unwittingly support industrial leadership by their own unconscious paradigmatic commitments, even if their intentions are avowedly opposed to these developments.

Mere factual accounts of how communication is employed, believably presented, can reinforce and legitimize current practice and freeze people into positions they now happen to occupy. Beniger's *Control Revolution*<sup>9</sup> generalizes the control metaphor to nearly all spheres of society and thus legitimizes control as the principal purpose and essence of modern information processing and communication technology.

Naturally, there have been critics, even within communication research, rightly accusing the western communication industry of contributing to vastly imbalanced distributions of information, international news services of under-representing developing countries, and academic research of accepting research monies from the military and the industry rather than from disinterested governmental or private institutions. This criticism echoes Paul Lazarsfeld's old distinction between administrative and critical research. But is such criticism really adequately critical?

Criticism of current communication practice largely focuses on interests and values, for example, blaming the U.S. for its allegedly imperialist designs, the industry for pursuing commercial aims and researchers for not collecting the right kind of data. It merely proposes alternative goals, for example, equal distribution or access to information, publicly responsible TV programming, citizen participation, banning pornography or advertising or more of this and less of that.

However, such criticism does not call into question, and I would say even reinforces, the very rationalist metaphor of communication as control that cannot but render people controllable for whatever purpose, good or bad. It does not call into question the orthodox conception of an outside reality to be mastered by those capable of using communication as a means to such ends. In other words, it does not interrogate its own governing metaphors.

Now, let me backtrack for a moment.

I have described two metaphors of communication, sharing and control, which we all seem to use fluently and casually. On the surface, you will probably agree, they both seem rather innocent but upon analysis their entailments turn out to have rather frightening consequences. Can we choose between supporting by our research either naked authority or improving manipulative interests? Do we feel more comfortable with surrendering our individuality to a perhaps seductive consensual ideal, which sharing entails, or with becoming trivial components of a perhaps beautiful rational machinery that control requires?

You may resort to the stereotypical answer to such dilemmas and say "that all depends on the context or on the purpose." But then you have already opted for the control metaphor that allows discussions of values and encourages making them the means of other ends but cannot reflect on the rationality implied therein.

You may think of avoiding such choices altogether by appealing to majority opinion. But then you submit to an authority which has at least today already been eclipsed by massive systems of popular entertainment that are designed to achieve industrially desirable communication effects and are by popularity accepted for what they do.

I do believe we are badly caught in an epistemological trap. We are victimized by our own unreflective use of metaphors of communication and by an orthodox approach to language and research that blinds us against recognizing the very constructions of ourselves that keep us there.

Let me therefore spend the remainder of this journey to point out some ladders for escape.

### Five Crucial Properties of Communication

After this brief excursion into just two metaphors of communication, I am asking myself and will try to answer the question "what is so special about communication that two (or more) metaphors can make it into such different phenomena? Or what could it be that invites some metaphors to reign supreme, at the exclusion of others?" The orthodox answer to these questions simply is to collect more data, to develop finer measuring instruments, better theory or to move into higher levels of abstraction. In view of what I have been saying, I think such recommendations are like encouragements to continue running against the same wall only harder.

I prefer instead to examine our very own experiences and communication practices. Let me shortcut this process by sketching five propositions.

1. Constructions of communication are within a wide range quite arbitrary. Obviously, communication as sharing is one way of conceiving how we interact. Communication as control is another construction. And I can think of many

more, for example, what Lakoff and Johnson have called the argument is war<sup>10</sup> metaphor or what Salmond described as the knowledge is seeing<sup>11</sup> metaphor. They too are intertwined with the practice of communication.

Also obviously, we can never know what we don't experience in one way or another and, since metaphors organize our experiences and actions in a coherent manner, we cannot distinguish between what something really is and what a metaphor made it to be.

The realization that we construct communication within our own cognition and language (with or without metaphors) and that we have options in this regard entails taking responsibilities for such constructions. In retrospect, cognitive sharing arises from the delusion that everyone looks at the same objective universe in the same way and that we could thereby clone each other. It denies anyone the capacity of constructing their own realities and of taking responsibility for actions within them. It particularly dismisses the possibility of an ecology of mind, a distributed multiverse.

Orthodox communication research too absolves researchers of any responsibility for their theories. It is literally irresponsible. Indeed, how could someone be held responsible for believing he or she merely finds facts, objectively describes creations by others or interprets a given text?

2. Communication fundamentally is a recursive process. The possibility of expressing responsibility for our own constructions of communication in discourse is like putting a map maker on the map he or she is making. Recursivity is a property of communication not shared with many other domains of knowledge. We cannot envision a biology of biology because, since biology consists of scientific knowledge of living forms, biology is not a living form itself. Similarly, there is no physics of physics but as I demonstrated, we have no difficulty creating a metaphor of metaphor, think about thinking and, above all, communicate about communication. There incidentally also is a cybernetics of cybernetics<sup>12</sup> from which many of these ideas come.

Again, the experience of being part of what we create conflicts with the orthodox injunction against self-reference, against interrogating oneself, against applying ones' principles and methods to oneself or against scientific observers participating in their own domain of observation, as Heinz von Foerster<sup>13</sup> put it.

Cybernetics taught us that recursive processes always are somewhat independent and self-sufficient. They require at most a nourishing environment but are otherwise autonomous, have a life of their own, create their own histories but also can, if one is not careful, create cognitive traps, escape from which requires awareness of their recursivity. Communication constitutively involves both these possibilities.

3. Knowledge about communication resides in its practice. We can inquire about communication only through communication with others and must consider language to be both vehicle and target of this inquiry. The recognition of this property actually does have a bit of a tradition in communication research. It may have started with Wittgenstein's language games.<sup>14</sup> But Austin certainly recognized in his performatives that speech acts can simultaneously assert and establish the fact they are asserting, such as in promises, commitments, marriage vows,<sup>15</sup> etc., all of which are fundamental to human communication and incidentally not representable in computers. Bateson's and later Watzlawick et al.'s notion that interpersonal communication may be about something, but more importantly establishes, reaffirms or alters relationships between communicators without explicitly referring to them,<sup>16</sup> point to the same phenomenon.

Whereas the orthodox must insist on a rigid separation of communication and what this communication is about, I am arguing that communication does not merely describe, it constitutes the very reality we communicate about. To constitute means to define or establish itself and there is therefore no necessary epistemological difference between what we know, what we practice and what we see in communication.

4. Communication processes, language and technology co-evolve. The relationship between language use and seeing is a cognitive consequence of communication practice. But this relationship goes much further. The "head of the household" metaphor does not merely make its user see a family as an organism, it also coordinates actions with and between members: deferring decisions, interviewing, paying salaries, collecting taxes, and so forth. Such interactions tend to force family members into roles compatible with the metaphors in use. Similarly, employing control metaphors in communication about communication does not only make us see audiences as consumers of entertainment, we also frame our research questions and findings accordingly. When published, with the usual authority of a scientific report, those who watch television are not the only ones to learn about their passivity from research findings. The industry will do its best to tailor its language and technology to encourage these descriptions. Publications about communication set in motion cycles of mutual adaptation akin to self-fulfilling prophecies that often converge and then ultimately terminate in consensus on how people normally and repeatedly interact with each other. This interaction also extends to technology which becomes the ultimate objectification of this consensus.

Thus, communication does not merely describe, as the orthodox have it, it brings forth, establishes, constitutes and creates the world we thereafter have to live in. It is by

practicing communication that reality is negotiated, society is constituted, technology is designed and things happen.

5. Communication mediates a trialectics between cognitions, interactions and institutions. I define cognition as the construction of the realities we see, interaction as additionally involving the construction of others and ourselves, including the language and technology through which we connect, and institutions as the construction of super-individual networks of interaction which we tend to metaphorize for lack of adequate understanding, for example, by attributing legal status, personalities, intention or powers to them. In my view, cognitions, interactions and institutions cannot exist without communication and all three are involved in a circular over-all recursive, mutually stabilizing and potentially self-sealing process.

I have already shown that the metaphor of sharing requires authority to resolve differences in interpretation whose persistence could make the orthodox construction of a common universe no longer viable. The maintenance of hierarchical authority structures that could mediate these differences depends in turn on promoting the very metaphors on which these forms can thrive, making individual cognition, communication technology and social organization converge toward a coherent interdependence. Since this metaphor denies human individuality or cognitive autonomy, the consequence of this convergence necessarily yields individual oppression by ever thriving institutions.

The control metaphor is involved in a similar trialectics except that it supports rational-technical organizations, including the communication industry with its insatiable thirst for predictability, that make a certain kind of rational behavior a prerequisite for human participation. I find the consequence of this convergence equally dehumanizing.

The trialectics I have been describing goes beyond complete individual understanding (almost by my definition of institution). Only the contours of the process are apparent. It is a simplified view of an ecology in which many populations of species interact but no one rules supreme. Those metaphors of communication that can be expressed in language and are supported by cognition, interactive practices (including technology), and institutions can survive. Others disappear. The viability of cognitive constructions is therefore not quite as arbitrary as I might have painted them before.

Before coming to the final station on this journey, I feel the need to add that my choice of the notion of metaphor was merely a matter of convenience. If you feel I have overdrawn my case, I might even say maybe. For me, metaphor is just one concept from a growing notion of cognition that is quite different from the traditional symbol or representation manipulation conception of mental process. As I said, I am thinking of mind more as an

ecology than as a hierarchically organized governing structure, or as a heterarchy whose distributed processes connect a great variety of patterns in ways yet to be explored. Metaphors are like mini-paradigms, borrowing structure from one semantic domain and guiding the constructions in another. A metaphor is not a thing but a process embedded in cognition and action. Metaphor merely is a more outstanding and perhaps better understood phenomenon than others I am only slowly becoming aware of.

#### About the Future

Let me conclude with a few words about the future of communication research which was part of my assignment. Convinced as I am, that communication creates reality, I would certainly contradict myself by predicting what that future will be. We all have to shape it. I merely have a wish for a direction.

I have made no secret that we have to overcome the orthodoxy of objectivist world constructions that blind us against many of the properties of communication I have been describing and thus enslave us in their natural circularities. I must also admit the thought that we may soon no longer be capable of escaping our increasing cognitive entrapment into a rational-technical and oppressive society. Against the backdrop of an increasingly global and all-penetrating communication system, a substantial measure of heresy is, I believe, essential to overcome this eclipse of reason.

However, based on what I said about the ensuing trialectics, I am not proposing that we could initiate a revolution by simply talking in different metaphors. But I am convinced, becoming aware of the entailments of the metaphors we are using, how we see each other through them and the institutions these encourage, is a necessary start. The construction and active promotion of new kinds of knowledge, theories and practices of communication that recognize the cognitive participation and autonomy of human individuals would be most important. We can always refuse to construct theories or to provide evidential support for disembodied knowledge that sustains inhumane conditions. As communication scholars, we in particular ought to be aware of and realize what communication entails and hence assume responsibility for the consequences of publishing our theory constructions. Whether the propositions I have sketched here qualify for such a beginning, and whether such communication notions might not end up in another trap, only the future can tell.

Nevertheless, I think it is possible to point to some radical principles for future theory construction regardless of the particular surface structure such communication

theories might acquire. Elsewhere, I have argued for an ethics for constructing communication<sup>17</sup> and formulated five imperatives of which I will read you four.<sup>18</sup>

The self-referential imperative reads: (always) INCLUDE YOURSELF AS A CONSTITUENT OF YOUR OWN CONSTRUCTIONS. It implicitly opposes the construction of disembodied knowledge and the positivist or naturalist mandate to blame an objective reality for the facts created through human communication. It calls for a continuous interrogation of how communication theories come about and what might follow from them in practice, thus providing the formal ground on which social scientists can assume responsibilities for their constructions. It calls for theories that recursively include their own effects, inform their own practice and are thereby bound to provoke some creative instability but by participation from within.

The ethical imperative reads: (always) GRANT OTHERS THAT OCCUR IN YOUR CONSTRUCTIONS THE SAME AUTONOMY YOU PRACTICE IN CONSTRUCTING THEM. It demands of scientific observers not to deny those observed the intellectual status they themselves enjoy, implies building respect and empathy into theories of communication they propose, encourages dialogue as the most noble form of human communication and obviates the necessity of authority.

The empirical imperative reads: INVENT AS MANY ALTERNATIVE CONSTRUCTIONS AS YOU CAN AND (always) ACT TO EXPERIENCE THE CONSTRAINTS ON THEIR VIABILITY. It calls for a creative expansion of our possible futures and the systematic testing of their ethical and practical limits. It charts a middle way between the scylla of solipsism (or idealism) and the charybdis of objectivism (or materialism).

Finally, my social imperative takes cognizance of the possibility that all communication can unduly constrain those interactively involved with each other and reads: IN COMMUNICATION WITH OTHERS, whether as communication researcher or in everyday life, (always) MAINTAIN OR EXPAND THE RANGE OF CHOICES POSSIBLE.<sup>19</sup>

On the surface, such imperatives for constructing theories, conducting research and engaging in communication with others do not seem too heretical after all, but they will mean a radical rethinking of our scientific and individual foundations. I hope they inform the practice of self-reflection, the continuous examination of our communication practice, in view of the responsibility we ought to assume for our own emancipation.

In opposition to the title of this talk, perhaps this is all that communication can be and should be about.

Thank you for joining me on a journey whose continuation is not without hope.

#### NOTES

1. One could characterize this tradition also as positivistic or naturalistic. It assumes the existence of a single, objective and hence observer-independent reality that needs to be discovered and described without or with only minimal disturbance by the scientific observer. Even where this tradition admits to the artifactual nature of human communication, positivist or naturalist techniques of research render communication as an observer-independent phenomenon.
2. George Lakoff. *Women, Fire and Dangerous Things*. Chicago: University Press, 1987; but also George Lakoff and Mark Johnson. *Metaphors We Live By*. Chicago: University of Chicago Press, 1980.
3. Universals of this kind are not merely properties common to all members of the species, but more importantly, they cannot easily if at all be removed once instituted. When A depends on B, B depends on C and C depends on A, then A, B and C are circularly dependent on each other and jointly autonomous. I believe cognition involves many such self-sustaining patterns.
4. Donald Schon. "Generative Metaphor: A Perspective on Problem-Setting in Social Policy." Pp. 254-283 in Andrew Orthony (Ed.). *Metaphor and Thought*. Cambridge: Cambridge University Press, 1979.
5. I have to include myself here for I too have unthinkingly used such metaphors in the past.
6. The naive physics in this notion of communication defies of course the first law of thermodynamics according to which matter and energy and hence anything physical that may be transmitted can be neither created nor destroyed. Message content seems inexhaustible and may be removed from its container repeatedly and without loss.
7. In all modesty, I have to exclude here my own conception of content analysis which demands of analysts that they construct their own contexts for making sense of data or for drawing valid inferences from text. In this conception, meaning is never contained in messages but arises in observer mediated interaction between data or text and their appropriately constructed contexts. See Klaus Krippendorff, *Content Analysis; An Introduction to Its Methodology*. Beverly Hills: Sage, 1980.
8. Claude E. Shannon and Warren Weaver. *The Mathematical Theory of Communication*. Urbana: University of Illinois Press, 1949. I might add that the publication of this book must be credited to Wilbur Schramm's foresight as director of the University of Illinois Press. It is still in press and a classic whose continuous publication record of nearly 40 years is unsurpassed by any other book on communication theory.

9. James R. Beniger. *The Control Revolution: Technological and Economic Origins of the Information Society*. Cambridge: Harvard University Press, 1986.
10. George Lakoff and Mark Johnson. *Metaphors We Live By*. Chicago: University of Chicago Press, 1980.
11. Ann Salmond. "Theoretical Landscapes: On Cross-Cultural Conceptions of Knowledge." Pp. 65-87 in D. Parkin (Ed.). *Semantic Anthropology*. New York: Academic Press, 1982.
12. For example, Heinz von Foerster, et al. *Cybernetics of Cybernetics or the Control of Control and the Communication of Communication*. Biomedical Computer Laboratory Report No. 73.38. Urbana: University of Illinois, 1974; Heinz von Foerster, "Cybernetics of Cybernetics," pp. 5-8 in Klaus Krippendorff (Ed.). *Communication and Control in Society*. New York: Gordon and Breach, 1979; *Cybernetic 1 2* published by The American Society for Cybernetics 1986-8.
13. In his *Observing Systems*, Seaside, CA: Intersystems Publications, 1981, Heinz von Foerster identified "objectivity" with the positivist maxim according to which "the properties of the observer shall not enter in the description of his observations" and "post-objectivity" with "the description of observations shall reveal the properties of the observer" (page xvi).
14. Ludwig Wittgenstein. *Philosophical Investigations*. New York: Macmillan, 1953.
15. John L. Austin. *Philosophical Papers*. Oxford: Oxford University Press, 1961. John L. Austin. *How to Do Things with Words*. New York: Oxford University Press, 1962.
16. Gregory Bateson. *Steps Toward an Ecology of Mind*. New York: Ballantine, 1972. Paul Watzlawick, Janet H. Beavin and Don D. Jackson. *Pragmatics of Communication*. New York: Norton, 1967.
17. Klaus Krippendorff. "On the Ethics of Constructing Communication." Presidential Address delivered at the International Communication Association Conference on Paradigm Dialogues, Honolulu, Hawaii, 1985. In press.
18. The aesthetic imperative reads CONSTRUCT YOUR OWN REALITY TO SEE and has been sufficiently elaborated in the preceding.
19. This deliberately expands on Heinz von Foerster's ethical imperative: "Act always so as to increase the number of choices" (p. 308, *Observing Systems*, op. cit.) by locating it in interaction or communication practices and preventing not only the numerical narrowing of choices but also the forcing of people into domains of individually meaningless decision making.