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Recommended Citation
Krippendorff, K. (1996). A Second-Order Cybernetics of Otherness. *Systems Research, 13* (3), 311-328. http://dx.doi.org/10.1002/(SICI)1099-1735(199609)13:3<311::AID-SRES106>3.0.CO;2-O

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Systems Research Vol. 13 No. 3, pp. 311-328 1996

A Second-order Cybernetics of Otherness

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Abstract

In the spirit of second-order cybernetics, human communication is re-conceptualized by including in the process not only its theorists but also their observed Others without whom social reality is inconceivable. This essay examines several versions of otherness, how the voices of Others survive social scientific inquiries, the dialogical spaces made available for people to build their home, and the kinds of citizenship encouraged. The essay draws attention to the epistemological limits of different inquiring practices and seeks to expand the range of possibilities for humans to see each Other.

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…any theory not founded on the nature of being human is a lie and a betrayal of [hu]man[ity]. An inhuman theory will inevitably lead to human consequences--if the therapist is consistent. Fortunately, many therapists have the gift of inconsistency. This, however endearing, cannot be regarded as ideal. (Laing, 1967, p.31).

... coming to see other human beings as 'one of us' rather than as 'them' is a matter of detailed description of what unfamiliar people are like and of redescription of what we ourselves are like. (Rorty, 1989,p. xvi).

Introduction

In 1974, Heinz von Foerster initiated a quantum leap in cybernetic thinking. Following a lecture by Margaret Mead (1968), who suggested that cybeneticians apply the principles of cybernetics to themselves, Foerster distinguished between the then prevailing cybernetics of observed systems--the cybernetics of Norbert Wiener and Ross Ashby--and the cybernetics of observing (systems). This posed new questions and opened an area of inquiry variously called cybernetics of cybernetics or second-order cybernetics. To me, the shift from a first-order to a second-order cybernetics signaled a shift in scientific attitude toward reality, from privileging the perspectives of detached observers, spectators or engineers of a world outside of themselves to acknowledging our own participation in the world we observe and construct as its constituents. He also added to Humberto Maturana's (1970) proposition: 'anything said is said *by* an observer,' one of his own: 'anything said is said *to* an observer' (Foerster, 1979) (my emphasis) thus highlighting the fact that observational accounts are constructed in language and for people capable of observation.

In this essay I want to take seriously the notion that communication involves people--not only as participants, as speakers and listeners, for example, but also as observers of their own participation in that process. This includes observing

other communicators as well. Participating in communication is primary. Without language, however, this participation has no discernible structure. It is in the speaking of communication that the practices being observed and talked of become communication and that its participants commit themselves to being in it. Speaking of communication is communication of communication and second-order by comparison, for it already presupposes one's communicative involvements. Communication, defined by and embodied in those speaking of it, thus becomes a fundamentally local and self-referential phenomenon. Indeed, what communication is or entails varies widely from one culture to another. Even in our own, explaining practices of living in terms of communication is a surprisingly recent invention and, in fact, a continuously evolving one. The very practice of writing scholarly essays on communication attests to my claim that nothing is ever entirely settled.

(Re)conceptualizing communication, talking or writing of communication, that is, communication of communication, is what we communication scholars do. The fact that communication scholars must actually do what they inquire into and talk of is unique to this kind of scholarship and calls for including themselves in their own domain of inquiry. When one wants to take theories as plausible accounts of particular practices, then communication theories can not exclude scholarly communication practices, among which is the creation and dissemination of theories. Consequently, *communication theories must be applicable to themselves.* This is not a trivial matter as will become apparent below.

Although social scientists communicate in numerous ways--interviewing their subjects, engaging discursively with colleagues, publishing their work, self-applications of communication theories are surprisingly rare if not totally absent from the literature. It is as if the communicative involvements of scientists were immune to critical examination or so perfectly obvious as to be not worthy of attention. This schism easily leads to theories that people find hard to live by. I know of no communication scholar who could communicate by the protocols of the classical theories they tend to perfect with their colleagues, for example, of communication as attitude change, as information transmission, as prediction and control, as management of meanings, or as institutionalized mass-production of messages. Communication, the way we engage in it, seems not the way we say it is. This essay, for instance, does not intend to change readers' affective evaluation of something they already know, nor to impart information that this writer has, but readers don't. One of my aims is to show the seriousness of not realizing that *we live in communication while theorizing it.*

All theories reside in talk and in publications. They may be difficult to understand by some, but they also can become quite popular, and end up transforming existing practices. This can happen to theories in physics as well as in sociology. However, social theories are not only created by people who claim to understand what they are saying; they are above all about people and may become understood by the very people of which these theories speak. When this happens, *social theories* can be said *to re-enter the very practices they claim to describe* and change their truths right in front of the theorists' eyes. Figure I
attempts to depict this recursion.

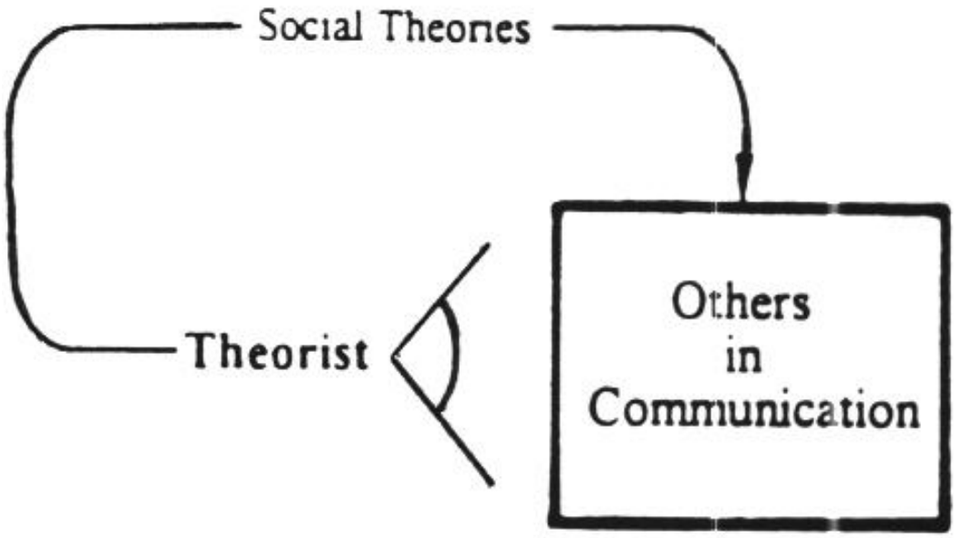

Figure 1 Re-entry of social theories

The paths along which theories are allowed to travel and re-enter demarcate disciplinary boundaries. The natural sciences, for example, have conveniently defined themselves as well as their objects so as to exclude re-entry problems. Matter is conceived not to understand theories of it, and naturalist methods of observation do not allow scientific observers to enter their own domain of observation. 'Objectivity', which von Foerster (1995) so aptly called 'the illusion that reality could be observed without an observer', still dominates much of scientific methodology. Under this illusion, scientific observers see themselves as occupying places that are very different from the objects they theorize.

When social theories re-enter the practices they describe through the people that engage them, they affect these practices, for example, by legitimizing them, by reconceptualizing them in scientific terms, or by stopping them altogether. Indeed, upon re-entry, social theories behave more like self-fulfilling prophesies (Merton, 1963; Watzlawick, 1984) than as statements of objective or observer-independent facts--regardless of their theorists' intentions. One well-documented example of re-entry is described in Robert Rosenthal *et al.* (1968) study of classrooms where teachers were given arbitrary intelligence scores of their students who ended up testing that way. We know that the majority of women who grow up in narratives of their inferiority quite naturally end up in subservient positions. We know of psychiatrists' inclination to talk patients into the very psychopathologies they are experts in treating. We know of how theories (or should I say myths) of communication drive teaching practices, therapies, self-improvement movements/courses, literature, international relations, and above all communication technologies. Social theories are thus changing the very social world that give rise to them. The injunction against observers entering their domain of observation is a positivist attempt to keep theories from becoming self-fulfilling, hold on to a representational notion of truth, dissociate theorists from the consequences of their theories and preserve the monologic of scientific communication, leaving no opening for the voices of human subjects to be heard. In the social domain, this injunction is unwarranted. This is so not only because it contradicts the facts of re-entry, but also because it gives social scientists the convenient excuse for denying their responsibility for the consequences of intervening into their domain of inquiry. Acknowledging this responsibility leads me to *see social scholarly pursuits as relational practices* (see Gergen, 1994).

Concerning such practices, let me add a contention that is central to this essay: whenever we abstract social theories from their primary settings (of people, situations, individuals or institutional practices) and communicate them as valid accounts

of social phenomena, we, as social scientists, invariably *designate places for other people to occupy*. How we conceive or speak of these Others, even when we omit explicit references to them, always directs our listening, our (re)searching, and our interacting with these unnamed and possibly unknown Others. Moreover, when we publish scientific theories of communication, we speak in our capacity as communication scholars and assume the authority to construct the otherness of Others. Whenever such theories re-enter peoples' lives, whenever they are talked of, re-articulated, and adopted as folk-theories, whenever they are realized and tested in practice, the particular spaces they offer for people to make their home in them and meet each Other, are likely influenced by the authority attributed to them. This demands of social theorists to assume a considerable responsibility. To criticize social theories for their political 'biases', for their lack of neutrality, is besides the point of finding a way of understanding them as communications.

To gain a handle on these relational practices I will take to heart the existentialist distinction between two kinds of world constructions: one where people see themselves surrounded by tangible objects that they need to manipulate to achieve their own ends; and the other where people see themselves related to other fellow human beings, much like themselves and with whom they appreciate being for whatever reasons. Martin Buber (1958, 1970; Horwitz, 1978) calls these the I-it and I-Thou relation, respectively. At least one study generated convincing data concerning the reality of this distinction (Roberts, 1985). I am not an existentialist, however, nor am I satisfied with the binary nature of his distinction and the contrast between the instrumental, rational and non-instrumental-intuitive ways of knowing it suggests. However, to retain the notion that *selves and Others are constructed relationally, in* communication with each Other, I will expand Buber's distinction to several I-Other relations. After all, English has several pronouns to refer to people, in singular and plural, in first, second and third person terms, and these provide us a natural way of bringing relational differences into focus. I am encouraged to draw a distinction within Buber's Thou by the misgivings expressed at least since the second translation of his book regarding the English for the German 'du' in the title of his original.*

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*Thus distinction is elaborated further *elsewhere* (Krippendorff, in Press).

Finally, I am concerned less with facts than with our epistemological blind spots and less with what is wrong than with creating compelling possibilities where few existed. Von Foerster (1981) considered it an ethical imperative to always increase the number of choices. I have argued for the need to open spaces when constructing human communication (Krippendorff, 1989) and suggested the creation of possibilities to be axiomatic for critical scholarship (Krippendorff, 1995). In this essay, therefore, I wish to expand the range of possible ways of understanding Others through social scientific inquiries. In addition I wish to enable social theorists to enter their domain of observation, to encourage researchers to cooperate with those being researched, to grant Others a voice if not the last word on how they appear in scientific accounts, and to encourage theories that can develop 'a social Life of their own'. All of these call for a radical opening to a new participatory form of inquiry and a dialogical way of knowing. In pursuit of this, I will outline five I-Other relations and then explore just three issues: the vulnerabilities of otherness; methodologies appropriate for inquiries within these relations; and the social or political roles people are encouraged to play when enacting either of these constructions.

I-They: Statistical aggregates

They are the subjects in experiments, the interviewees in public opinion polls and the respondents to survey questionnaires. They are observed from behind one-way mirrors, assessed by standard measuring instruments, manipulated to give analyzable answers. They are also described in terms they cannot contest. For the inquiring I, they are either male

or female, black or white, high or low TV-viewers, employed or unemployed, or of a certain IQ. They are not allowed to identify themselves, and they have no idea of who looks at them why, how and where. It is this treatment that makes them different from us. They are the Others we have nothing in common with.

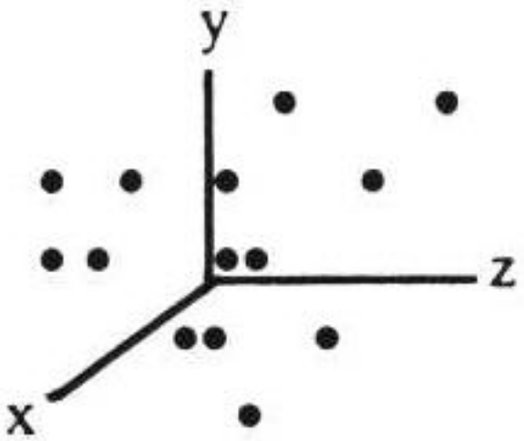

Figure 2 They

Statistical aggregates, to be clear, are not only *researchers' artifacts*, they also are *constructed in a particular way*. On the one hand, by drawing a representative sample of members from a community of people, individuals are selected at random and the fabric of their being with each Other, their relatedness, and any evidence of communication is discarded. This forced individualization renders people as points in multivariate distributions (Figure 2) whose dimensions primarily are the researchers. On the other hand, by describing the properties of the subjects (demographic characteristics, social positions, ethnicity, nationality, knowledge, attitudes, preferences, for example) 'objectively', the researchers fail to acknowledge their own role in bringing these properties into the open. Although interviews and observations often precede such aggregations, this analytical practice effectively *erases all evidence of I-they communication as well as of the constructed nature of the accounts of 'them'.*

Moreover, measures of aggregates, frequencies, averages, standard deviations, correlations, etc. characterize properties of whole aggregates at the expense of their constituent members. In statistical terms, people appear as the passive bearers of group characteristics. Indeed, families with 2.5 children do not exist although this may well be the United States average. It may be true statistically that women are shorter and physically weaker than men, but demonstrably false in large numbers of actual pairs. Similarly, probabilities of diseases do not predict the state of any one inchvidual's health. Statistical accounts surrender *the properties of individuals to that of conceptual* groups. This is what makes'them' different from us.

I-It: Trivial machines

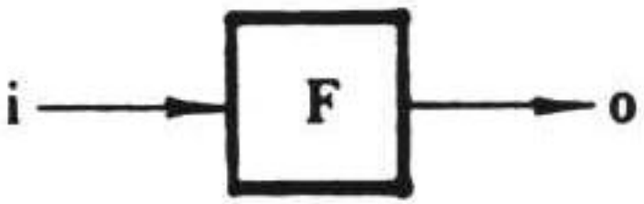

Figure 3 A trivial it

As shown in Figure 3, trivial machines are driven by their inputs. Describing something as a trivial machine is to focus on the predictability of its behavior, *o*, from the conditions that impinge upon it, its input *i*. This is accomplished by formulating a relation between the two observables, ideally in the form of a *mathematical function F : o = F(i)*. Functions do not offer choices. They can explain no more than how things respond to their inputs. As far as such machines are concerned, inputs are undetermined, open, to be specified by outside events, by their users, by the inquiring I, for example, the I who may manipulate them for observable effects. Deviations from the ideal of a mathematical function tend to be explained either as variations that unaccountably 'enter' a trivial machine--in communication theory called noise and in measurement theory called unreliability--or as breakdowns, that is, as unanticipated and perhaps undesirable changes in function. Intentions, agency, creativity, or dialogical practices that largely are responsible for human behavioral variations are not part of this vocabulary and hence ruled out.

Trivial machine conceptions of Others are the backbone of behavioral research. Most social research texts take the distinction between independent variables and dependent variables as entirely self-evident and consider the discovery of the relations between them as the fundamental empirical problem of science. Commitments to trivial machine conceptions provide the researcher the methodological advantage of creating objects of study that are *observationally determinable*, which is to say that their input-output functions are computable from *observa*tions. Correlation coefficients, for instance, indicate in numerical terms the degree to which any two variables are linearly related, the stimuli and responses of an organism, for example. Regression equations express the extent to which predictor variables shed light on a chosen criterion, for example the conditions that cause TV viewers to engage in violence. Claude Shannon's (1949) information quantifies by how much a system's output is controlled by its inputs. Most of these statistics also are measures of the extent to which one is justified treating a system as a trivial machine. As von Foerster (1984) already showed, trivial machines occur in many guises:

$$o = F(i)$$

Effect	=	Structure (cause)
Cipher	=	Code (clear)
Response	=	Culture (challenge)
Interpretation	=	Reader (text)
Consumption	=	(TV viewers) Advertisements
Performance	=	Actor (script)
Answer	=	Interviewee (question)
Attitude change	=	Perception (persuasive message)

A current example of the latter is the use of an Elaboration Likelihood Model as a theory of attitude formation. A large group of researchers, whose work was extensively reviewed (Craig, 1993) claim attitude change to be describable by the function: $a' - a = a\ is(m - a)$, where a is the initial attitude, a' is the attitude after a message advocating m was received and a, i and s are three empirically estimated factors, jointly defining the function.

Evidently, people are not only describable as trivial machines, they can also be instructed to behave that way, in the military, for example, or on assembly lines, as well as in controlled scientific experiments. Such situations are tailor made to yield trivial forms of explanation. However, when people happen not to conform to such models, they are often considered unreliable, unruly, or noisy. Upholding trivial machine conceptions as yardsticks for human behavior blinds researchers when coming to grips with the human capabilities such conceptions do not permit.

I-It: Nontrivial machines

Nontrivial machines respond not only to inputs, but also to their internal states. Von Foerster (1984), who introduced this notion, diagrams their simplest case in terms of inputs i, outputs o, intemal states z, which are related by two functions, the driving function $F:0=F(i,z)$, and the (internal) state function $G : z' = G\ (i, z)$.

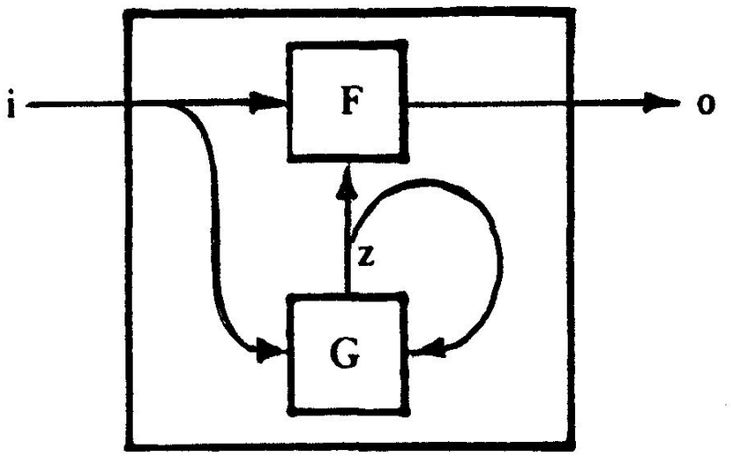

Figure 4 A nontrivial it

A cursory inspection of Figure 4 yields four important properties. First, the internal states of a nontrivial machine affect themselves, which can be seen in the recursive loop involving z. Nontrivial machines can thus be said to maintain a life of their own. Second, while the internal states of a nontrivial machine can be interpreted as a kind of repository of its history, this internal repository escapes observation. Third, because the behavior of a nontrivial machine results from the interaction between their inputs and their internal states, its output *o* is not predictable from the input *i*, even after extensive observations. Internal states can lay dormant and affect outputs after long periods of time and nontrivial machines appear to change their behavior in seemingly unexpected ways. Von Foerster calls their behaviour *analytically indeterminable.* Fourth and finally, nontrivial machines can be built from entirely deterministic and trivial components, as indicated by the two defining functions. Von Foerster therefore calls such systems *synthetically determinable.*

It has been tempting to see certain human qualities in nontrivial machines. Consciousness is certainly recursive. History is surely important in people's lives. Human cognition is complex, self-referential and unobservable from the outside. We

know how difficult it is to figure out what people are thinking and to predict what they will do, even in everyday situations. Interaction between sensation, memory and action is widely assumed and we feel comfortable constructing cognitive models on this assumption. Still, none of these common beliefs suggest that humans could be assembled from known components. Although medicine has made considerable progress in transplanting organs, the ontogeny of humans follows a path that is different from that of artificial mechanisms. Computers are more adequate prototypes of nontrivial machines.

Ross Ashby, one of my teachers, once built an extremely simple nontrivial machine and gave his students the assignment to figure out what it does. Each time they thought they had worked out its pattern it showed another surprising move, leading to considerable frustration. The next day he showed them the staggering combinatorial possibilities against which they were guessing. Von Foerster (1984) computed the number of possible nontrivial machines with only one binary output *o* with values 0 or 1 for n = 1, 2, 3, 4 binary variables *i* and *z*. These numbers soon grow beyond practical considerations. For one (n = 1) input variable there are fewer than 10^5 possible machines. For n = 2 there are already nearly 10^{77}, for n = 3 there are 10^{4002} and for n = 4 there are 10^{70003}. Considering the richness of the human senses and the fact that the human brain has about 11 billion unobserved neurons that either fire or rest, understanding humans by observation alone is a hopeless undertaking. With the unrealistically small number of inputs in the above example, 10^{77} is already beyond the possibility of systematic exploration. There are not enough atoms on earth to represent these many possibilities. Generally, it is a *transcomputational task* to figure out what nontrivial machines do by observation alone. Von Foerster concluded his exploration by saying that

'Nontrivial machines are "analytically"
(I prefer "observationally") indeterminable.'

This states a profound epistemological limit for all inquiries by observation. In fact, Von Foerster's conclusion joins Heisenberg's Uncertainty Principle, Godel's Incompleteness Theorem and Gill's (statistical) Indeterminacy Principle, all of which assert albeit different limits on knowability by observation.

Unless one is intent to trivialize the world and all the people who populate it with the help of such mechanistic descriptions exclusive of the observing I, the most conservative lesson one can derive from the above is that there always are far too many equally valid explanations, theories or models of observed behavior to make intelligent selections. Their numbers expand hyper-exponentially with increasing numbers of states, shorter histories and smaller proportions of variables available to observation. In light of these transcomputational numbers, the probability of selecting an observational account that will always yield valid predictions is extremely remote. Sooner or later, nontrivial machines seem not to collaborate with their theorists. In practice, that is, within the finite amount of time available for observation and analysis,

nontrivial systems afford
unmanageably many observational accounts.

Whether such accounts are constructed in natural language, in mathematical terms or in the form of computer models, in the face of their transcomputational numbers the validity of observational accounts becomes virtually unascertainable. Observer capabilities, preferences and institutionalized habits invariably enter. Under these conditions compelling stories, rich metaphors or powerful analogues can become attractive alternatives to

mathematical accounts,--as evidenced in how we conceptualize and operate our own personal computers. When it comes to humans, who have far richer inner lives and capabilities of coping with very different kinds of complexities than those that are manifest in machines, the detached observer position leads us into the paradox of being overwhelmed by a virtually endless list of logically possible observational accounts while having to dismiss as self-serving, biased or unscientific the accounts that people provide about their own experiences. Understanding Others not as structure determined (albeit nontrivial) machines, but as linguistically capable beings requires a radically different approach.

I-You: Persons in communication

Third-person accounts locate Others outside a dialogue, often in the monologue of an observing I. Whereas the personal pronouns 'he' and , 'she' hold Others in reserved for potential communication, the use of 'it' virtually denies its referents personhood and precludes the possibility of meaningful communication. By contrast, second-person accounts always refer to people presently talked with and thus add a dimension that could be ignored in I-it accounts: *language.* 'You' occurs in talk among people that are *responsive* to each Other. Neither the speakers nor the spoken to can escape knowing something of each Other. I and You denote persons. Communication between them becomes a collaborative effort and inquiries within I-You relations essentially are *participatory.* As therapists know, observation is essential, but dialogue provides the more important key to Others' lives. Indeed, a great deal can be learned about Others as well as about selves by getting *communicationally involved.*

Conceptions of You and I are always *complementary.* A mother does not exist without a child. There can be no buyer without a seller. Actors and audiences require each Other. And on the behavioral level, a joke needs a teller and Others to laugh about it. Complementarity must not be confused with equality, however. Nor does it have anything to do with sharing. It simply suggests that roles somehow fit like hand in glove (not like hand in hand) and the difference between them is constitutive of a particular relationship. Not all possible pairs of roles fit that way, however. When a senator meets a dentist, either the senator becomes a patient, the dentist speaks as a member of the senator's constituency, or they find a third way of relating, outside these roles.

In I-You communication, every *I is I's Others' Other.* I speaks in the expectation of You's understanding, in the anticipation of You's ability to rearticulate what is said in You's own terms, always awaiting I's understanding in turn--all of which being manifestly embodied in their intertwined practices--which is the process participants observe and monitor. In this recursion, accounts do not reflect I's internal make-up, but I's history and future of interaction with You, including a virtual I"s construction of self and Other as well as that virtual I"s construction of a virtual You’s construction of self and Other. Thus, in communication, persons become recursively embedded in the enacted accounts of each Other. Such accounts not only occur within this relationship, they also constitute it. This understanding moves communication far away from notions of 'sending and receiving messages', which may be adequate for conceptualizing how technical devices interact with one another, but not for how humans engage each other dialogically, including via mediating technologies. The often-feared infinity in this recursive conception should be considered merely an artifact of logic. It has hardly ever bothered anyone in practice. We seem to be able to shift between levels of recursion without the need to think in many of these levels at any one time (Laing in Miell and Miell, 1986).

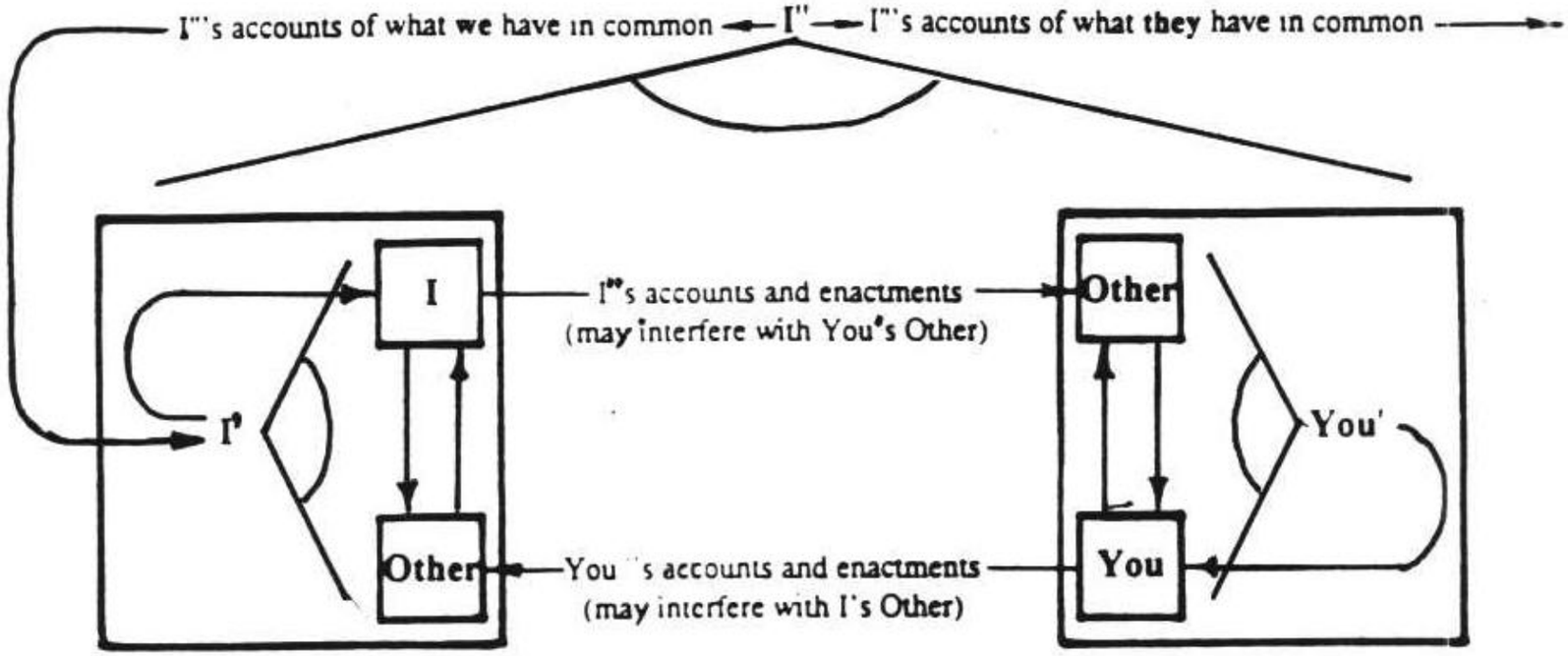

Figure 5 An 1-You relation

Since relational accounts are always constructed in the expectation of being understood, which presupposes that communicators have some ability to simulate or ponder their interactions in a space before they are enacted, Figure 5 suggests that dialogues with Others may be rehearsed before they are enacted into outer dialogues, which in turn can affirm or challenge expectations of each Other, of each Other's Other, and so forth, thus braiding each Other's reality constructions into each other. In this way, theories of human communication embrace the consequences of understanding and enacting them. Erving Goffman's (1959) dramaturgical approach exemplifies the complementary construction of persons. The work of R.D. Laing (1967) exemplifies the structural symmetries of these constructions. John Shotter (1994) suggests that the notion of an account, as a joint accomplishment, replace the non-interactive notion of theory.

It seems difficult to understand what is going on inside I-You relations without communicative involvements (Roberts and Bavelas, in press). What detached observers cannot experience is precisely what makes such a relation real: the unfolding history of the particular engagement and the embodied feelings of being in communication. In addition, Jones and Nisbett (1972) found 'a pervasive tendency for actors to attribute their actions to situational requirements, whereas observers tend to attribute the same actions to stable personality dispositions' (p. 80). In view if this rather robust finding, the psychological concept of personality, the stable character of a person, is more likely to be an artifact of detached observation rather than an empirical or experiential fact. Sigmund Freud, unaware of how his authoritarian relationship to his patients dictated his perceptions, might be said to have built a whole science on this artifact of observation, a science that fuelled the by now huge industry of psychoanalytic practices. Now we start to see such monological theories as barriers to understanding human communication dialogically.

Because I-You accounts of communication must account for diverse ways of understanding and enacting them into intertwined practices, I and You are not only *observationally but also synthetically indeterminate.* Neither can we understand a You as an isolated individual and from a detached observer's position nor can we compose a You from known parts the

way engineers design systems from existing components, precisely because I and You as well as the particular relation between them evolve in processes of mutual adjustment. During communicative involvements, nothing is stable except what no participant cares to change or all seek to preserve. The empirical fact that we can nevertheless learn quite well of each Other while being in communication leads me to say that I and You are *'interactively determinable'*. To understand I-You relations, dialogical involvement is necessary.

The hitch in this conception of communication lies in the temptation to construct commonalties for I and You almost as in I-it accounts: a common ground, a common situation, a common language, a common (communication) technology, a common culture, a common history, a common code of ethics, a common mission, consensus, or agreement, etc. These are logical or technological constructions, not empirical ones, and may take the role of foundations in which everyone is to ground their arguments, of overarching superstructures that are alleged to govern the behavior of all participants, or of something we are told (by someone) we share, like virtues, vocabularies, biologies or media. This temptation is encouraged by the etymology of 'communication'. It shares its stem with 'commonality', 'community', and 'communion'. The everyday conception that communication takes place in a medium and must converge toward consensus as well as the idea of eigenvalues as the property of closed systems amount to much the same. Many scientific theories of communication have adopted this as their premise, whether they focus on a shared language as Hans Georg Gadamer (1975) did and many constructionists do (e.g. Gergen, 1985), on a universal pragmatics as Jürgen Habermas (1970) does, or whether they presuppose the existence of a physical medium in which communication is thought of taking place or a universe to which the 'content' of communication is supposed to refer.

Assertions of commonalities can be associated with the exertion of power and with efforts to control dialogical processes. For example, rhetorical questions like 'don't we agree on that?', references to '(our) family values', declarations that 'we speak the same language' and shared technologies are always constructed by someone who values such commonalities with the implicit expectations that Others accept their conception and live with their entailments. By constructing or asserting them, commonalties become part of a communication process and accepting their articulations within that process makes them real. Only by taking them for granted or completely ignoring how they entered and got hold of the process do commonalities acquire the appearance, but only that, of 'objectivity'. One must keep in mind that a *we never speaks. Individual Is* do--but always in continuation of a history of interaction with Others. The authoritative assertion of commonalities, while contestable in principle, can easily silence divergent voices and become oppressive.

The we of claimed commonalities can be seen from exclusive or inclusive perspectives, from a position outside that relationship, when an observer describes what they have in common, and from a position inside that relationship, when one participating I describes what *we* share. Either perspective privileges the I that claims to see what Others don't: the I that presupposes the standards by which Others are to be judged; the I whose ontological claims everyone is expected to accept. A good example that moreover protects I's authority from possible challenges is the claim of hegemony as an existing social condition. By Antonio Gramsci's (1987) widely accepted definition, hegemony denotes an all pervasive, discursively mediated, and consensual superstructure. In cultural studies, hegemony outdated and replaced the older notion of 'ideology', while continuing to depict all those affected, the dominated as well as the dominant, as unable to recognize its pervasive presence and its all-embracing power. To avoid the paradox of claiming the ability to see what one's theory declares invisible, assertions about 'hegemonic conditions' can be made only from the position of a privileged observer who is free of this condition. This places the theorist of hegemony outside the supposed commonality and into an I-they relation to those to whom he or she applies the concept. The theory is predicated on constructing Others as blind to what I claims able to observe with crystal clarity. In I-You communication, the theory of hegemony is a pathological construction in the sense of diminishing Yous, and getting them to be theys. This rhetorically suspect

theory becomes blatantly devious when its theorists are aware of the fact that their authority depends on hiding its self-serving ontology from those they wish to control. By excluding other voices, the concept of hegemony reveals itself as 'paternalism' toward Others.

I-Thou: Human beings in conversation

Just as in I-You relations, I and Thou denotes a pair of complementary constructions of people characterized by their ability to speak for themselves and to create a world of their own, recursively including therein the worlds of Others. However, unlike in I-You relations, masks that hide a 'true self', deceptions, representations of Others, no longer have a place. In I-Thou relations, *people constitute themselves in conversational practices:* Neither unilaterally imposes its categories on the Other. Neither assumes a position superior to the Other. Neither claims to be the agent for a larger whole, the guardian of an overriding purpose, or the owner of a universal truth. Stable pattern, even rules of interaction, that could develop in conversations nevertheless remain contestable within them. In other words there can be no authority, no reality and no commonality that I or Thou could not question. In I-Thou relations human beings are true to themselves (Gadamer, 1975), authentic (Roberts, 1985), intimate with each Other, and responsible to each Other. Buber (1958) speaks of 'grace' (p. 11) and of 'love' (p. 14).

One of the features of I-Thou relations is that the positions of *I and Thou are freely interchangeable.* This goes beyond regarding I as its Other's Other. I and Thou have the ability to take turns in speaking from each Other's perspectives, and can shift freely across all complementarities that preserve the qualities of Thou. The kind of power that arises with the presumption of non-interchangeability that has no place in I-Thou relations. Roles construed as noninterchangeable, for example, male and female, parent and child, therapist and client, or ethnographer and native are incommensurate with I-Thou relations. This does not mean that people who see unalterable differences in each Other could not participate in I-Thou relations outside these perceptions. I am merely suggesting here that I-Thou relations cannot draw on such differences. Serbs and Muslims in former Yugoslavia can get along fine provided neither uses their divergent histories as a way of constructing unbridgeable identities. Then, however, they would no longer speak as Serbs and as Muslims, but as human beings. At this point conversation is possible.

If relational practices are contestable in I-Thou conversations, *accounts of them must be able to enter these conversations*, explicitly or implicitly, and *circulate freely* among the parties involved. Just as in I-You, accounts that re-enter I-Thou communication may transform what they speak of and reconstruct the conversational history, the I-Thou relation, as well as the very I and Thou that embodies them. However, unlike in I-You, I-Thou accounts must respect each Other's being and preserve the possibility of continued conversation. Although this condition would not lend itself to formulating accounts of this relation from its outside, Figure 6 offers a sketch of what I mean: Let **I'** indicate the virtual I that observes, conceptualizes and evaluates **I**'s involvement in an I-Thou relation from a position I does *not* momentarily occupy, for example, from its past, its future, or from its Other. This could be seen in Figure 5 as well. Let **Thou'** indicate the equally self-reflecting Thou, **I** and **Thou** being in 'view' of or present to each Other-without mediation. When **I** or **Thou** speak, they always enter their own explicit or implicit accounts of what they see happening into an always already ongoing conversation and thus acknowledge each Others' histories, presences, expectations, and commitments: Furthermore, let this diagram be the very form of the accounts **I'** and/or **Thou'** enter into their conversation (from left and right of the diagram). Thus, and not apparent in this figure, accounts of I-Thou relation s contain themselves, are recursively self-embedded in the conversational dynamics they unfold and are entirely local if not closed to outside interventions.

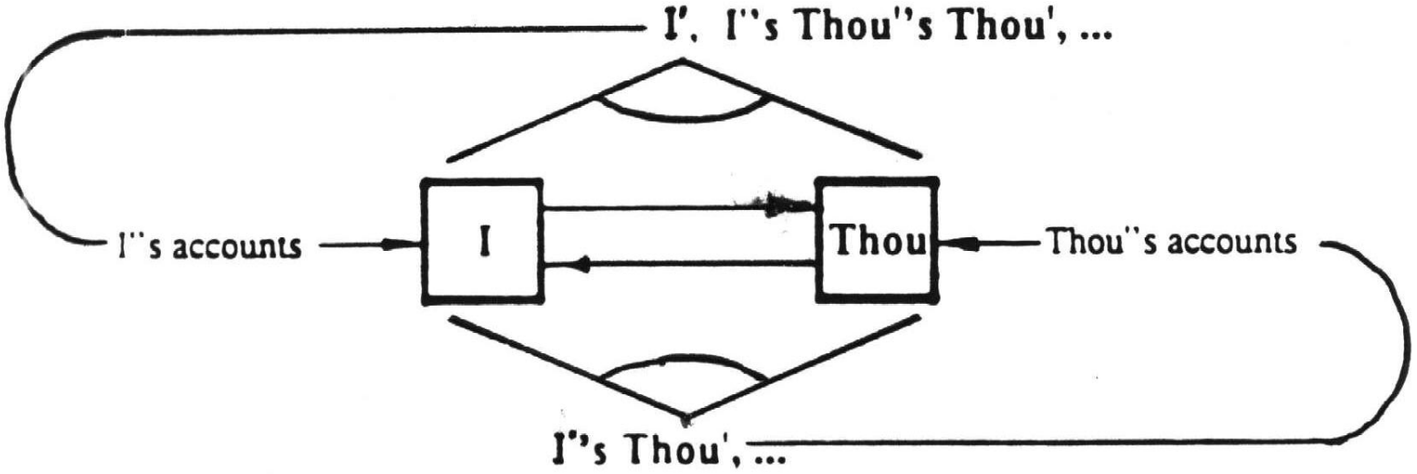

Figure 6 An I-Thou *relation*

Writing of dialogue, Hans-Georg Gadamer (1975) says: 'In human relations the important thing is ... to experience the "Thou" truly as a "Thou", i.e. not to overlook [Thou's] claim and to listen to what [Thou] says to us. To this end, openness is necessary. ... Without this kind of openness to one another there is no genuine human relationship' (p. 323). I do not interpret this to mean that listening could lead to seeing who the Other 'really' is. Gadamer seems to have this in mind. All Others occur in I's constructions, as also suggested in Figure 6. Yet, by attentive listening to Thou's voice, by not insisting on the exclusive validity of one I's constructions, by not looking for Thou's faults or weaknesses, by not assuming that historical trends must continue into the future, by not attempting to persuade or use the other for whatever purpose, in other words, by not privileging one's own (naturally more familiar) logic over the logic of one's Others, an I can open itself up and reserve a *dialogical space for Thou to emerge and be Thouself therein.*

The concept of 'dialogue' is only one logical complement of 'monologue'. I propose 'multilogue' as another. In multi-logue several distinct possibilities, several incommensurate logics, or several parallel worlds grow side by side. In choosing this term I wish to oppose two tendencies toward single world accounts (including of dialogue). First, efforts to impose coherences amounts to constructing an overarching metalogic or underlying ground. This would enforce the merger of several worlds into one and frustrate multi-logue. Second, in as much as the voices of Others must always be able to introduce new perspectives if not entirely new worlds into a conversation, I and Thou has to maintain or *continuously expand their* clearings for *listening to each* Other, and to invite each Other to enter the open and deliberately unstructured spaces in which to meet. In other words, it is the condition of multi-logue that I must preserve against the temptation of monological certainties which merely tolerate the logic of Others as derived versions if not distortions of I's reality or universe. Being in conversation means continuously creating *spaces for the worlds of I and of Thou to expand and for both to more around, to make their homes, and be-with each Other.*

Applying his conception of dialogue to Dostoevsky's writing Mikhail Bakhtin (1984) says much the same. 'Monologism, at its extreme,' Bakhtin suggests, 'denies the existence outside itself of another consciousness with equal rights and equal responsibilities, another I with equal rights *[thou]'* (p. 292). In the 'homophonic' text, all aspects of narrative are subordinated to the will of the author. Others become mere mouthpieces of that author's ideological viewpoints. 'A monologic ... world does not recognize someone else's thought, someone else's idea, as an object of representation' (p. 79). By contrast, Dostoevsky does not seek to subordinate or suppress the pervasive vari-directional accents and double voiced discourses that characterize the natural milieu of living language; rather, he aims to enhance and encourage [a] "dialogically-charged atmosphere" ... This] can be found in the interaction between the hero and the author, the series

of "microdialogues" that take place between the various characters, and even the "inner speech" (or "internal dialogue"] that occurs within the hero's own self-consciousness. ... [It is only within the polyphonic novel that artistic justice can be done to the "objective complexity, contradictoriness and multi-voicedness" of the social world' (Gardiner, 1992). Bakhtin (1984) writes:'... a consciousness in Dostoevsky's world is presented not on the path of its own evolution and growth, that is, not historically, but rather *alongside* other consciousness, it can not concentrate on itself and its own idea, on the immanent logical development of that idea; instead it is pulled into interaction with other consciousness' (p. 32). I would say, *several 'logics' unfold in parallel but always in acknowledgment of each Other*. In multi-logue, I resists the temptation of shaping the voice (and logic of reality) of Others. Instead, I invites the worlds of Others to enter I's accounts in ways recognizable by these Others as their very own. Multi-logue necessarily emerges when I and Thou thrive on discovering possibilities that neither could imagine by itself, Multi-logue describes the multiple social realities needed for Bakhtin's polyphonic dialogue to not only take place, but also enable their participants to move out of burdensome if not oppressive relational practices (Krippendorff, 1995).

As Buber suggested, I-Thou relations are informed by *love*--not love of someone, but love of the multi-faceted (to which I want to add unmediated) otherness that creates and complements the I, the feeling of being in sync with Others' understanding and of appreciating the diversity of otherness that love makes possible. 'Love is between I and Thou...' 'Love is the responsibility of an I for a Thou' (Buber, 1958, pp.14-15). *Celebrating the Other* as Edward Sampson (1993) suggests is a start but may not be enough. The construction of a Thou in a world that may be radically different if not incommensurate with ones own yet occupiable as well opens *the possibility for I to see itself through an Other's (Thou's) eyes*.*

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* Although I used this metaphor in a 1984 version of this paper, I was pleased to learn that the Austrian Therapist Victor Frankl already used it the same kind of circular construction (Foerster, 1991).

Comparisons

The following table summarizes some of the consequences of distinguishing among the five I-Other relations developed above. I will travel through these in three respects: the vulnerability of otherness; methodological issues of inquiring into Others; and political consequences of different Other-constructions, and leave further explorations to the reader.

Table 1 A comparison of I–Other relations

Others'	I–Thou: humans beings in conversation	I–You: persons in communication	I–It: nontrivial machines	I–It: trivial machines	I–They: statistical aggregates
Determinability	Not at issue	Interactively determinable (mutually, but only partially understandable)	Synthetically determinable (structurally reproducible)	Observationally determinable (behaviorally predictable and controllable)	Statistically determinable (locatable in classes, groups)
Structure	Multi-logues of togetherness, language games	Recursively embedded constructions of Is and Yous with I–we/they commonalities	Structurally determined system (logical net, rules, rationality)	Mathematical function or code	None, a point within mathematical coordinates, member of sets
Source of identity	I and Thou— emerge in mutual respect for each Other's authenticity of being	I and You— emerge in each Other's complementary and cooperatively maintained reality constructions	I— in terms of how it is build, what it can be substituted for or do for I	I— in terms of the functions I prefers it to perform	I— in terms of I's categories of surveillance
Agency	Agencies are mutually constituted with joint possibilities expanding	The agency of one constrains the agency of the Other, both converge to commonalities	None,— I's inability to observe its structure gives the appearance of pseudo-freedom	None	None
Assigned purpose— the criteria I's accounts seek to meet	Possibility of continued conversation— of continued being—with each Other	Viability in communication, intertwined understandings separately benefiting each Other	Serviceability to I; providing I with accounts for its synthesis and use	Manipulability by I; predictability/ controllability derived from observations over time	Surveillability by I; providing I with information that 'captures' them in I's view
Kind of society	Emanicipatory	Political	Technological	Functional	Mass

Vulnerabilities of othernesses

To show their vulnerability, that is, how easily one kind of otherness can erode into another, the five relations distinguished above may be seen as ordered. Clearly, accounts of they in I-they relations tend to be most stable as Others are precluded from providing feedback on I's conceptualizations. By contrast, for I and Thou everything is examinable, contestable, but also always incomplete from any one's perspective. The spaces for I and Thou to be with each Other expand and this always entails an element of mutual unpredictability. I therefore take the construction of human beings in I-Thou relations as the prototypical case from which all, the other forms of otherness are derivable by introducing constraints.

Starting from the Thou that I faces in conversation, I am suggesting, as soon as an I tries to keep Others in the places I

wants them to occupy, as soon as this I refuses to let Others speak from positions of their choice, for example, by claiming superiority, better equipment, more knowledge, or the ability to understand Thou better than Thou does, as soon as I-Thou conversation becomes restricted by a technology or third party rules, the I-Thou relation degrades into an I-You relation in which such inequities can make their home and noninterchangeable identities may settle in. As soon as I claims unilateral access to what I and Thou are said to share, a common ground, purpose, history or consensus, etc., or as soon as I insists on dictionary definitions, consistency, rationality or conformity to a general theory of human nature, without Thou's consent, Thou ceases to exist. For example, when lovers start examining the costs and benefits of being in that relation, keep a tab on how many favors each gave the Other, or play 'tit for tat', rational rules of conduct emerge and the relationship of love transforms itself into an economic one where a common currency matters (Solomon, 1990).

Although I-Thou relations seem to be most vulnerable, all human relations may erode. When the I in an I-You relation takes the position of a detached observer who denies those observed a voice in I's constructions, or when people are assigned to serve particular functions, whether as employees or as enemies, then this I starts using its Others as instances of categories or as tools. Since these conditions do not grant it / they respect, the inquiring I will have no reasons to talk and listen to it / them, nor to negotiate with it / them an identity suitable to each Other. When You erodes into it / they, the dialogue of two-way communication retreats into the monologue of one-way communication. Denying Others their agency opens the ways to describing them as structurally, situationally or historically determined nontrivial entities. Furthermore, denying the importance of internal processes, histories or dispositions reduces them further to trivial stimulus-response mechanisms that merely react to messages or to whatever they face: answering questions, watching TV advertisements, and obeying instructions. Finally, generalizing away individual differences and grouping them into homogeneous classes creates the collective 'they' of people whose identity fades into I's categorizations.

In the domain of interpersonal relations, Mary Roberts (1985) reports similar vulnerabilities, When her subjects held I-it conceptions involving their partners, it was virtually impossible for them to engage in I-Thou relationships. Such subjects could not even comprehend accounts of more intimate ways of relating to Others, much less venturing into such relations. They remained stuck in I-it world constructions and (mistreated their partners as servants or as 'doormats', as she said, seemingly closed to their partner's conceptions, and unable to take responsibilities for their part in the unfolding dynamics between them. However, if subjects could understand accounts of I-Thou relations, they could envision being in such relationships and become aware when their partner turned out not to live up to these expectations. I have met many who had great difficulties seeing Others as living in worlds different from their own and far more that found it impossible to see themselves through these different Others' eyes. I am suggesting this to be even more difficult in social inquiries.

Buber (1958) has seen the vulnerability of Thou as well but differently. He considers love as being focused on whole human beings. Hate, he says, is always limiting, focusing on parts of Others which takes Thou into components (that have no agency by themselves). Hating the whole person transforms the Thou to the it of an object (pp. 16-17). Apparently, not only can human relations easily erode in careless practices, they may no longer be recoverable.

Methodological implications

Walking through this ordering of othernesses from the other direction, reveals as myth that we could understand Others by moving from simple components to complex systems--much as we build machines. In population statistics, I suggested, relational phenomena have no place. Communication, if it happens to be practiced between the sampled members of a population, is completely unrecognizable in psychological accounts of them. In monological constructions of Others

(they and it), dialogical processes, processes that are at least in part informed by the inquiring I's interactive involvement with You or Thou, have no place. Also, a Thou cannot be experienced by people who see Others in terms of functions and social roles. I contend that the great amount of 'unaccounted variation' or 'noise' that social scientific data are said to be plagued by is only partially due to the inability, if not unwillingness, of researchers to take more complex data, narratives, dialogues and conversations into account. Far more important, however, is the researchers' fear of leaving their authority-conferring and secure detached observer or engineering roles and stepping into less unilaterally controllable, participatory and dialogical practices.

More specifically, our well-worn scientific methods of analyzing observational data favor statistical and deterministic or mechanistic models and thus trivialize people. As soon as objects of scientific inquiries are nontrivial, observational methods lose their power. The virtual impossibility to select with some meaningful degree of certainty among the many conceivable models, theories or accounts one that will stay valid questions the detached observer role as well as the related representational notion of truth. Under nontrivial conditions, researchers have to become builders of what they seek to understand. However, inquiries by synthesis encounter their own limitations when confronted by persons who can not be taken apart and reassembled. Human cognition is not only pliable, but also nearly inaccessible to observation outside communicative interventions by Others. To inquire into persons as knowledgeable communicators and as active constituents of social realities, researchers cannot avoid becoming personally involved in co-creating the very complementary social realities they seek to understand, but now without unilateral control. I-You accounts that are accepted or rearticulated by Others become constitutive of the very reality they assert and interactively determine the behavior of these Others as much as that of the inquiring I. Such accounts are dialogical, not propositional. Although the very intent of researchers to inquire into Others contradicts I-Thou relations, I suggest that no method of inquiry should claim to be unquestionable by those inquired into and thus preclude the possibility of Thou.

Taking inquiry as a relational practice challenges the troubling representational notion of truth in yet another way. As a property of propositions about a nonlinguistic world this notion of truth assumes that language is not part of the world it describes. This makes it difficult for theoretical considerations to address much of what people do: talking, reflecting, theorizing themselves and Others, that is, languaging. When the objects of inquiry are remotely nontrivial, an awareness of the researchers' linguistic contributions becomes indispensable and shifts attention from the 'truths of propositions' to 'the making of truth claims.' Such a shift has invited all kinds of criticisms, largely under the umbrella of observer, ideological or social biases which operate within the representational notion of truth. This does not go far enough, however. When truth claims concern people who can claim their own truths, their acceptance is no longer a matter of avoiding biases but of being viable in communication among stake holders, of providing social benefits, and of constructing social realities for constituents to Live in. This speaks for a dialogical truth and against a propositional one.

I would say that all scientific propositions, theories and accounts--even those denying their relational nature--stay alive in networks of communication and are accepted by people (scientists) because of what they mean to them. In I-they relations, I suggest that accounts are accepted when they provide information about human population characteristics of interest to those with large-scale supervisory or *surveillance* needs. A survey, for example, that fails to provide relevant information means nothing, regardless of its propositional truth. I-trivial it accounts preserve the *instrumentality* of Others, and I-nontrivial it accounts preserve their *rational substitutability*. The classical criteria of 'prediction' and 'control' tie scientists to instrumental conceptions and the criterion of substitutability tie them to technology. Criteria in I-You relations are again quite different. Having to survive contestations, rearticulations and reenactments in communication, I-You accounts end up preserving the very *complementary social realities* that their constituents are willing to live in. In I-Thou accounts, informativeness, manipulability, serviceability and viability within communication hardly matter, but

the preservation of the possibilities of conversation is critical. Relational criteria of this kind not only provide a more differentiated vocabulary of reasons for accepting propositions, theories, models or accounts of Others we inquire into, but also are closer to actual communication practices than the decontextualized claims of propositional truths.

Relational criteria also redefine problems of establishing knowledge. In I-they, I seems to resolve classificatory uncertainties by objectifying social stereotypes exclusive of I. In I-trivial it, classifications are less important than I's ability of successful manipulation. What matters in I-nontrivial it is I's ability of constructing serviceable Others, substituting or expanding on human capabilities. In I-You, understanding manifests itself in I's ability to dialogically, reflexively and creatively participate with Others, in complementarily constructing social realities. In I-Thou, understanding means bootstrapping oneself in the presence of the radical otherness of Others and maintaining the possibility of co-emancipation.

Political consequences of various I-Other accounts

The final question I want to address concerns the political implications of these five ways of knowing Others. The above might give the impression that my concern is interpersonal. This is not so. All social scientists ultimately face their subjects, however superficial this may be. All social scientists also publish their theories and involve themselves in discourses through which their accounts acquire currency. Finally, all social scientific accounts can re-enter the social fabrics they describe, mobilize opposition, intervene in existing social practices, create or destroy social realities, become a political matter, and maintain or encourage certain societal forms and associated citizenships to emerge. I will comment on these.

Most obviously, knowledge gained from *statistically aggregated population characteristics pro*vides convenient overviews of large populations from superior (or objective) perspectives. This kind of knowledge effectively supports the large-scale surveillance of populations and, when published, offers individuals a way to orient themselves, but only in the surveyors categories. What may start as a purely statistical artifact can become real as people learn of their class memberships and act on their alleged group properties. Being couched in scientific terms, people may surrender their conceptual abilities to how these accounts depict them. This benefits social institutions that thrive on such conceptions of social reality.

Through the massive re-entry of population statistics the methodological distinction between intellectually superior scientific observers and synthetic aggregates of (skillfully constrained, purposefully disabled, and methodologically inferior) Others comes to be reproduced in the social distinction between superior users of statistical generalizations and the masses of cultural dupes that occur in these accounts. Oscar Gandy (1993) has analyzed the political economy of automating this knowledge in the form of increasingly sophisticated electronic surveillance systems that remain essentially hidden from view**.** The social use of this kind of knowledge nourishes a *mass* 'democracy' that is governed not so much by individually responsible political actors, but by large institutions, governments, as well as corporations, who command the instruments for large-scale *surveillance.*

Accounting for people as *trivial machines* structurally equates them with technical devices and easily manipulable tools. Knowledge of this kind finds its uses wherever there is a need for performing *functions* on command, reliably, mechanically, automatically and without reflection. Sciences whose methodologies produce trivial theories of Others cannot help but deliver humans into the hands of those with access to their inputs and interest in their outputs: the mass media, marketing or the insurance industry, for example. Such an accounting supports a society whose organizing idea

is *to serve social functions--as* articulated by structural-functionalism in sociology.

Theorizing people in terms of *nontrivial machines* can at least in part be linked to unprecedented advances in computer technology which informed this conception in the first place. The fascination with such machines fuels technological developments generally, including efforts to find technical solutions to human and social problems. Computer metaphors for explaining human behavior in terms of information processing, cognition, computation and control are spreading and have created such disciplines as computational linguistics and artificial intelligence. Studying humans with the help of nontrivial models, finding technologies that mimic them, leads not so much to the human use of Others as tools, but to their systematic displacement by technical devices deemed more efficient. We should remind ourselves that in the 18th and 19th century, computers were humans who could calculate with paper and pencil. Now such referents are unheard of. The very claim that contemporary computers are faster, able to store more information, and operate more reliably than humans do attests to the prevailing practice of considering humans as flawed by comparison to nontrivial machines. Such inquiries have systematically retarded the understanding of non-mechanical human contributions to society. Celebrating algorithms at the expense of the infinitely more complex human interactions nourishes a conception of society as a reliable *technology that we and Others are to serve* This kind of understanding Others is not merely instrumental, it promotes a universal *technological rationality* we are asked to apply to everyday life.

Unlike technical devices, *persons speak* to each Other, live in stories told to each Other, construct themselves in discourses and participate in different publics. Their roles are not fixed, but continually negotiated and articulated in communication and in contrast to each Other.

Knowledge of I and of You is highly situation specific, mutually recognizable, rearticulable and public. Theories that are both of and debated within such public relationships are literally *political* in nature. To be political means to acknowledge each Other's roles as speakers and listeners, to cognize each Other's conceptualizations, to know whose facts and opinions matter, to evaluate what is said and done as being motivated by interests and responding to what absent members of one's community have said, or are thought to think and expected to do. Others in this society are citizens by the classical definition.

However, in this political form of society, the assumption that communication (by its received definition) must converge toward mutual understanding or conserve its medium provides a hidden lever for the (often institutionalized) I that asserts such common grounds and thus remains in charge of the political realities that can grow on it. This fundationalism, mostly unnoticed and unquestioned, provides the hidden support for political institutions to develop and thrive.

Political institutions become oppressive when they act to preserve the unquestionableness of their foundations. A society in which people can contest its foundations, question its authorities and reflect on whatever creates barriers to *open conversation* can be called *emancipatory.* This is a society in which Others are respected as human beings, as Thou, in which the diversity of otherness is encouraged, and multi-logue is practiced. This society will continuously expand the possibilities for self and Others to be with each Other and move on. Preserving the possibility of Thou, the possibility of multi-logical world constructions and the possibility of dialogue between diverse people may be the most important contribution social scientists could make, even if this possibility resides only in small groups and persists for short periods of time.

References

Bakhtin, M. M. (1984). *Problems of Dostoevsky's poetics.* (Emerson, C., ed. and translator) Manchester University Press, Manchester.

Buber, M. (1970). *I and Thou*. (Kaufmann, W., translator), Scribner, New York.

Buber, M. (1958). *I and Thou.* (Smith, R. G., translator), Macmillan, New York-

Craig, R. T. (ed.). (1993) . Specifying the ELM. *Communication Theory*, 3, 50-82 and 336-362.

von Foerster, H. (1995). From a public lecture, con -firmed in personal communication.

von Foerster, H. (1991). Through the eyes of the other. In Steier, F. (ed.). *Research and Reflectivity*, London: Sage, London, pp. 63-75.

von Foerster, H. (1984). Principles of self-organization in a socio-managerial context. In Ulrich, H., and Probst, G. J. B. (eds.), *Self-organization and Managernent of Social Systems*, Springer, Berlin, pp. 2-24.

von Foerster, H. (1981). On constructing a reality. In *Observing Systems*, Intersystems Seaside, CA, pp. 288-309.

von Foerster, H. (1979). Cybernetics of Cybernetics. In Krippendorff, K. (ed.), *Communication and Control in Society*, Gordon and Breach, New York, pp. 5-8.

von Foerster, H. (1974). *Cybernetics of Cybernetics or the Control of Control and the Communication of* Cornmunication, University of Illinois, Urban, IL.

Gadamer, H. G. (1975). Truth *and Method*, Crossroad, New York.

Gandy, O. (1993). *The Panoptic Sort: A Political Economy of Personal Information.* Westview,Boulder, CO.

Gardiner, M. (1992). *The Dialogics of Critique; M. M. Bakhtin and the Theory of Ideology*, Routledge, New York.

Gergen, K. J. (1994). *Realities and Relationships: Soundings in Social Construction*, Harvard University Press, Cambridge, MA.

Gergen, K. J. (1985). The social constructionist movement in modern psychology, *American Psvchologist*, 49, 266-275.

Goffman, E. (1959). *The Presentation of Self in Everyday Life*, Doubleday-Anchor, *Garden Cit***y,** *NY.*

Gramsci, A. (1987). Selections from the Prison Notebooks (Hoare, Q., and Smith, G. N., eds. and translators), International, New York.

Habermas, J. (1970). Towards a theory of communicative competence, *Inquiry*, 13, 360-375.

Horwitz, R. (1978). *Buber's Way to 'I and Thou'.* Lambert Schneider, Heidelberg.

Jones, E. E., and Nisbett, R. E. (1972). The actor and the observer: divergent perceptions of the causes of behavior. In Jones, E. E., Kanouse, D. E., KeUv, H. H., Nisbett, R. E., Valins, S., and Weiner, B. (eds.), *Attribution: Perceiving the Causes of Behavior***,** General Learning Press, Morristown, NJ, pp. 79-94

Krippendorff, K. (1997). Seeing oneself through others' eyes--in social inquiry. In Huspek. M., and Radford, G. P., (eds.), *Transgressing Discourses: Communication and the Voice of other,* SUNY Press, Albany, NY.

Krippendorff, K (1995). Undoing power. *Critical Issues in Mass Communication,* 12(2), 101-132.

Krippendorff, K (1989). On the ethics of constructing communication. Presidential address delivered to the International Communication Association Conference, May 26, 1985 in Honolulu, Hawaii. In Dervin, B., Grossberg, L., O'Keefe, B. J., and Vartella, E., (eds.). *Rethinking Communication: Paradigm Issues,* Sage, Newbury Park, CA, Vol. 1, pp. 66-96.

Laing, R. D. (1967). *The Politics of Experience.* Pantheon Books, New York.

Maturana, H. (1970). Neurophysiology of cognition. In Garvin, P. (ed.). *Cognition, a Multiple View,* Spartan Books, New York, pp. 3-23.

Mead, M. (1968). Cybernetics of Cybernetics. In von Foerster, H. *et al.* (eds.). *Purposive Systems,* Spartan Books, New York, pp. 1-11.

Merton, R. K (1963). The self-fulfilling prophesy. In *Social Theory and Social Structure,* 4th edn., Free Press, New York, pp. 421-436.

Miell, D.K., and Miell, D.E. (1986). Recursion in interpersonal cognition. In Antaki, C., and Lewis, A. (eds), *Mental Mirrors: Meta-cognition in Social Knowledge and Cognition.* Sage, London, pp. 27-40.

Roberts, G. L., and Bavelas, J. B. (in press). The communicative dictionary: a collaborative theory of meaning. In Stewart, J. (ed.). *Beyond the Symbol Model: Reflections on the Representational Nature of Language,* SUNY, Albany, NY, Chap. 4.

Roberts, M.K. (1985). I and Thou: a study of personal relationships. *Advances in Descriptive Psychology,* 4**,** 231-258.

Rorty, R. (1989). *Contingency, Irony, and Solidarity,* Cambridge University Press, Cambridge, MA.

Rosenthal, R., and Jacobson, L. (1968). *Pygmalion in the Classroom: Teacher Expectation and Pupils' Intellectual Development,* Holt, Rinehart, and Winston, New York.

Sampson, E. E. (1993). *Celebrating the Other: A Dialogical Account of Human Nature,* Westview, Boulder, CO.

Shannon, C. E. (1949). *The Mathematical Theory of Communication*, University of Illinois Press, Urbana, IL.

Shotter, J. (1984). *Social Accountability and Selfhood*, Blackwell, Oxford.

Solomon, R. C. (1990). *Love, Emotion, Myth, and Metaphor*, Prometheus, Buffalo, NY.

Watzlawick, P. (1984). Self-fulfilling Prophesies. In *The Invented Reality*, Norton, New York, pp. 95-116.

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