

Speech Acts and Voices: Response to Winograd *et al.*

LUCY SUCHMAN

Xerox Palo Alto Research Center, 3333 Coyote Hill Road, Palo Alto, CA 94304, U.S.A.

Email: suchman@parc.xerox.com

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The critique presented in Suchman (1994a) was motivated by two central premises of CSCW research. First, that designers of CSCW systems are designers of organizational life, through the systems that they build.¹ Second, that CSCW technologies require the construction of a relation between computational formalisms and the structuring of the organizational activities that are to be transformed (Bowers, 1992; Agre, 1994). I take the language/action perspective and the Coordinator, as represented in Winograd and Flores (1986) and Flores *et al.* (1988), as particularly influential exemplars of both of these premises.

My critique begins with the question of the appropriateness and adequacy of speech act theory as a basis for system design. Others have raised this question before, so my aim is not to restate the arguments but rather to bring them to the fore in relation to the role of speech act theory in the language/action perspective. The basic argument is that the categorical framework offered by speech act theory provides a particularly attractive foundation for designers interested in inscribing a formal structure of communications into their technology. Moreover, given a premise that organizational communications at present are in a general state of disarray – a premise that Winograd, Flores and their colleagues clearly hold – systems so inscribed are offered as providing remedies and improvements to organizational life.

In light of the categorical foundations of speech act theory, the language/action perspective and the Coordinator, I next take up the question of categories and their politics. The heart of my argument is that the politics of categories turns on the question of who gets to define relevant categories, and who or what gets categorized. The important point is that wherever we find systems of categorization we should look to see where they come from, and what work they are doing for whom.

If we look at systems of categorization in this way, there is evidence that they have been used historically as devices of control by some and resistance by

* My title is due to Mike Hales; thanks to Mike Hales, Ted Metcalfe and Randy Trigg for reading and comments.

¹ This proposition can be seen as a call for humility and responsibility on the one hand, or as a form of hubris on the other. The difference, I believe, lies in how we locate ourselves as specific actors among the many involved in the reproduction and transformation of organizations.

others. That is, struggles over who defines agendas, interests, identities, and the like are expressed in part as contests over what systems of categorization will prevail. The Coordinator inscribes a particular categorization scheme that its authors represent as arising from a fundamental ontology of human communication and as universally applicable. In contrast, I ask whose world view informs that particular scheme, and whose notions of organizational life are represented by it. My reading of Winograd and Flores suggests that the definitions of organizational problems and the proposed solutions that inform the design of the Coordinator are primarily managerial ones. Being managerial in itself does not make something oppressive. But representing managerial interests as disinterested and universal means that those concerns are defined as *the* relevant concerns for organization members. And in that move, other interests and concerns are rendered invisible.

The responses

Terry Winograd's response to my critique and the twelve commentaries in this issue call out a range of topics, in some cases agreeing and elaborating, in some disagreeing and offering counter-arguments, in others pointing to what the commentators see as confusions or vagaries within the original argument. As an organizing structure for my response I will take up the commentaries topically, responding to particular authors as I go.

THE ADEQUACY OF SPEECH ACT THEORY

As I stated in my original argument, I believe that the adequacy of speech act theory as an account of human communication has been compellingly challenged by a number of authors (Suchman, 1994a, p. 179; Schegloff, 1992). Button's commentary in this issue adds to that body of critique. The critique focuses on speech act theory's reliance on a system of universal categories as a device for ordering language/intention, and the status of such a universal categorization scheme with respect to specific occasions of talk-in-interaction. Lynch's commentary adds clarity to the discussion by distinguishing between the ontological claim that the Coordinator makes explicit structures of activity already implicit in organizational action, and the practical claim that it provides a normative structuring to which organizational action can/should be made accountable.² His principal concern is with the first of these claims. My aim is to go further, attempting

² This distinction has echoes of previous debates over "mental models" of technical systems, with some taking them to reflect naturally occurring representational states *originating inside users' heads*, others taking them to be constructs by system designers that might be conveyed to users as additional artifacts of potential use in understanding the system.

to replace naturalized accounts of organizational growth, associated "needs" for coordination, and the promise of speech act-based technologies to meet those needs, with accounts of the ongoing (re)production and transformation of organizations as interested social, political and technological arrangements.

In endorsing and building upon the critique of speech act theory, I wish to emphasize just two points here. First, my concern with respect to the Coordinator is less an argument with the use of speech act theory as such, than with the proposal that any system of categories might provide the grounds for a universally applicable, normative system of organizational behavior.³ Second, even if it were the case that such a normative system somehow turned out to be practically adequate or arguably "effective" in regulating organizational activity, I would still want to question whose interests were represented in the resulting order. There are no more universal criteria of organizational effectiveness than there are universal categories of human communicative intent.

THE GENERAL AND THE PARTICULAR

Several respondents characterize me as a champion for the "uniqueness of each situation" (e.g. Curtis, p. 61; see also Winograd 1994, p. 192). It is true that one of the concerns I express in my critique turns on the way in which Winograd and Flores tie communicative clarity and consistency to standardization of the terms in which organization members articulate their intentions. But I hear as well in the invocation of "situatedness" an echo of a common misreading of my own writings on the relations between standardization and specific occasions of practical action. The usual reduction of my argument is to something along the lines of "generalization of any kind is impossible," an argument that obviously refutes itself. I won't recapitulate again what my argument is (for my most recent attempt, see Suchman 1993), but simply say that the question for me is not whether general formulations exist, are useful, and have consequences for specific occasions, but rather how they are produced as general and made effective on specific occasions, and by whom.

DESIGN INTENTIONS

Two concerns expressed in the commentaries are that my critique lacks grounding in empirical studies of the Coordinator in use, and/or that it seems to question the personal integrity of the Coordinator's designers. These two concerns raise

³ This is in some contrast with King's suggestion that it is the commitment of speech acts to writing that troubles me (p. 52). In either case, the categories that the theory provides rely upon specific acts of situated interpretation, not themselves accounted for within the theory, for their "force." I see the speech/writing distinction as of less relevance to my argument than the descriptive/prescriptive one.

what I think are actually related issues. The first has to do with the status of writing and reading texts (for example, *Understanding Computers and Cognition*), the second with the relation of such texts to those other “writings” that we call systems and to the “readings” of their use (for example, the design and use of the Coordinator).

With respect to writing and reading texts, two of the commentators (de Michelis, Harper) were deeply troubled by the sense that in my critique I seemed to be launching a kind of personal attack on Terry Winograd and Fernando Flores. My critique is not meant to be based on attributions of “attitudes, motivations and beliefs” to Winograd and Flores (Harper, p. 44), however, but in a reading of their *texts*.⁴ I take responsibility for my readings of those texts, and offer apologies for any excesses in my writing about them that might contribute to the sense that my critique was meant to be a personal one.⁵

With respect to designing systems, it is by now well accepted that the relation between rationales of technology design and actualities of use is a complex and indeterminate one.⁶ For me the question becomes how we can think about the assessment of new technologies and our responsibility as their designers in a way consistent with a recognition of this indeterminacy. Harper takes me to task for the “missed opportunity” of providing an ethnomethodological account of the Coordinator in use (p. 43). Whether this is a missed opportunity or not (it is true that I did not set out to do such a study in the context of this particular critique), Harper goes on to suggest that the kind of analysis I did is somehow antithetical to ethnomethodology. I would argue, however, that among the things that members do is to engage in textual production and debate. We can not, accordingly, treat texts as off-limits to ethnomethodological analysis, however much we (rightly, I believe) problematize their relations to other doings as a topic for investigation. So while it is true that I do not extend my analysis of Winograd and Flores’ texts to an empirical investigation of what Harper points to as “the doings associated with the Coordinator” (p. 44), I want to argue that what I do take up, while not definitive or exhaustive of what needs to be said, is nonetheless of value in its own right.

⁴ In focussing on the two early texts (Winograd and Flores 1986, Flores et al 1988) I did not mean to “freeze” the discussion at some point in the past and ignore more recent efforts (see de Michelis, p. 70) but just to work from the establishing statements of the language/action perspective. I think, moreover, that the texts I take up continue to be widely cited and influential within the CSCW community, and to provide a basis for subsequent developments within the language/action perspective. If there has been a substantial re-thinking of the perspective, I would welcome further discussion of how more recent developments depart from the original ideas.

⁵ In fact, my longstanding interactions with Terry Winograd in the context of work together over the past 15 years in *Computer Professionals for Social Responsibility* leads me to regard him as a role model for what a thoughtful, concerned design practice could be.

⁶ However, the extent to which technological determinism has been abandoned within the design community is unclear. See for example the commentary by Curtis in this issue, where he argues that “The benefit of The Coordinator rests on the speed with which it transforms conversation into action, and the extent to which the resulting actions execute in an orderly and coordinated way” (p. 62). At the same time, Curtis goes on to point out that if the process by which organizational commitments are made lacks integrity, no amount of computer-aided explicitness will make it sound.

The critique that I offer of the Coordinator, in sum, is clearly and unequivocally based on specific texts. In that sense it departs from much of my previous writings. But what we *say* as designers about our artifacts must also be fair game for critique. To oversimplify greatly, there seem to me to be these aspects to the analysis of technologies:

- The technology’s positioning by its designers in terms of articulated premises and assumptions that inform its design;
- How/to what extent those premises and assumptions are inscribed in the artifact;
- Specific design practices;
- How the artifact is taken up and put into use, including appropriations that result effectively in its redesign.

In previous work I have taken up various of these aspects, with a particular emphasis on the indeterminacies that characterize relations between design and use. I trust that I need not belabor my own commitment to studies of technologies in use as necessary to any adequate understanding of what, quite literally, they are. In this case, however, I wanted to take seriously the rhetorical positioning of the Coordinator by Winograd and Flores as *one* crucial element of an analysis.

INCOMMENSURATE ALTERNATIVES

Several of the commentators take me to task for my oppositional stance, and seem to suggest that all standpoints within the CSCW community can be compatible, given appropriate compromises. While I agree that no forward motion is possible without some compromise, I also believe that in deciding when and how to compromise we need to recognize when alternative positions are not simply alternatives, or potentially complementary, but are in fact incommensurate. I take the basic premises of business process reengineering as described in Hammer (1990), for example, to be incompatible with my own beliefs and values concerning the relations between tradition and transformation in work organizations. And I take the basic premises of the language/action perspective as described in Winograd and Flores (1986) and Flores et al. (1988) to be incompatible with my beliefs and values – grounded as much as possible in investigations – regarding social/technical organization. If beliefs and values equal “religion” as de Michelis implies, and arguments regarding incommensurate alternatives with respect to beliefs and values equal “religious wars” (p. 69), so be it. Uncritical acceptance of pronouncements regarding the emancipatory power of technology would seem to me at least at religious.

As for having what Harper uneasily suggests is an agenda of my own, I certainly do (see Suchman 1994b and in press for recent attempts to describe it). I assume that we all work from agendas – intellectual, practical, political – that shape the problems we take up, and the perspectives that we bring to them. My

goal in part is to make those agendas a more explicit part of our discussion. I do not think this means that the discussion must reduce to *ad hominem* attacks, nor to competing truth claims on “moral correctness” (Harper, p. 45) that divide us into Insiders and Outsiders. On the contrary, I believe that the best way to avoid the kind of Insider/Outsider divisions that Harper fears is to acknowledge discordant voices within the CSCW community, and let them speak.

WHERE IS POWER

Randall complains that I seem “to believe that categories can be demonstrated to have a political force separable from rationalist claims made for them” (p. 48).⁷ The issue for me turns less on whether categories in any sense have political force or whether the power of artifacts lies only in the claims made for them, and more on the question of who produces artifacts for, or on behalf of, whom, on what premises and with what stated objectives. It is there that the politics lie. My “hostility,” then, is not to “the disciplinary power of category” (p. 49) but rather, as I stated earlier, to the premise that some others are in a position to know better which categories are good for us as organization members than we do ourselves. That is to say, it is the normative imposition of categories by some actors on others, in ways explicitly designed for the latter’s improvement, that I wish to call into question.⁸ And it is that which I take from Harvey Sacks’ treatment of “hotrodders” as “a revolutionary category” (1979).

As Randall points out, any reading of artifacts as “having politics” that attributes significance or consequence to them (or worse to some social “forces” underlying them) in a way that obviates the specific practices of their production and use would violate the spirit of Sacks and the ethnomethodological program. In that respect, I want to emphasize that my use of the phrase “Do categories have politics?” is meant as a pointer to the deeply reflexive relation between artifacts and the circumstances of their production and use, as sites for investigation.⁹ It is that *relation* that I mean to identify as a political one.

At the same time, Randall says that “categorization is an activity – something that members observably do. No more and no less” (p. 48). This is unquestionably Sacks’ position. Yet Sacks’ special genius was to be able to find in such mundane activities their world-making consequences. While I take to heart

⁷ He also attributes to me the view that “as principled persons we may have objections to the politics [the speech acts] embody” (p. 47). “Principled persons” come with all sorts of politics, and I assume that some will object to Winograd and Flores’ assertions regarding the Coordinator and others will not. Rather than speaking for others, I attempt to state my own objections to the politics that I find implicated in Winograd and Flores’ writings.

⁸ I hope this makes clear that I assume, along with Orlikowski, that categories as such can be either “constraining or enabling” (p. 75), and that “[w]hat or who is enabled and what or who is constrained by a category system can only be assessed empirically, by examining the content of the category system in question, the context in which it is being used, and the actors using or affected by it” (p. 76).

⁹ Where, again, I take the circumstances of their production to include, but in no way to be limited to, what their designers say about them.

Randall’s complaint that I may be too easily associating Foucauldian conceptions of “discursive practice” with Sacks’ interests in the use of ordinary language,¹⁰ I disagree that “using Sacks’ characterization of categorization devices to construct an argument concerning social control constitutes a massive misreading” (p. 48). Surely this is the case if by “social control” we mean the ways in which that topic is treated in “big issue” sociology. But Sacks himself suggests that

the important problems of social change, I would take it anyway, would involve laying out such things as the sets of categories, how they’re used, what’s known about any member, and beginning to play with shifts in the rules for application of a category and with shifts in the properties of any category (op cit, p. 14).

Similarly, while Randall claims that “[t]he problem of order, or ‘discipline,’ as conceived by sociology at large is a problem only for certain kinds of ‘big issue’ sociologists, not for members” (p. 48), I would suggest that for members like Winograd and Flores, at least, problems of order and categorization seem central.

It is also true that I am somewhat equivocal in distinguishing between the claim that categories can be used politically and/or that categories in some sense “have politics”. This because I am deeply undecided on the question of the extent to which how artifacts can be taken up, while clearly not determined by how they are configured, is nevertheless structured in various ways by specific aspects of their design.¹¹ This is an empirical question as much as a theoretical one, inviting the kinds of investigations of problematic relations between the elements of technological analysis (articulated design intent, inscribed artifact, design practice, artifact in design/use) that I outlined above. To Randall’s question “When the missionaries banned the use of native names, was it the new categories or the act of banning that disinherited future generations?” I would answer, “Both.”

Finally, while Randall is right that my knowledge of Marxism is (regrettably) insufficient to enable me to make use of those analyses in my critique, I at least would welcome them into CSCW discourse, along with explicit discussion of the profit motive and its consequences for system design.

DISCIPLINES

In his commentary, Bogen points, as Winograd himself does in his response, to the equivocality of the term “discipline,” as implying either the exercise of

¹⁰ I in no way mean to reduce disciplinary practice to categorization. I was simply trying to take up *one* practice that seemed relevant to a critique of the Coordinator.

¹¹ Bowers’ (1992) recap of Langdon Winner’s argument on the politics of artifacts may be helpful here. Bowers points out that the “social engineering” that resulted from the particular way in which the bridges over the parkways of Long Island, NY were constructed – namely, the effective exclusion of those dependent on public transportation through a design that provided sufficient clearance for automobiles, but not for NY City buses – is identifiably political regardless of any intent on the part of Robert Moses or the bridges’ designers.

authority, usually in a way designed to bring about some (return to) normative behavior and often associated with punishment, or as a form of (self-imposed) socially organized practice.¹² Bogen further points out that Foucault and his followers retain that equivocality, as a kind of studied agnosticism. So what is my aim in taking up the notion of discipline here? On the one hand, I want to recognize and maintain the equivocality. But I also want to underscore the sense in which both readings of the term implicate an alignment of activity within some moral order. Viewed through the lens of this commonality, the crucial distinction between the two readings turns more on from where the order comes. Is it, as is clearly the case in the first reading of "discipline," imposed from outside, from some "higher" authority (canonically, the father, who knows best), or is it generated from within the constituency being ordered, as part of the constitution of members' identities as members of a distinctive association? That, again, is the point of my use of Sacks' "hotrodders" example.

VOICES

Given a reframing of the question not as whether categorization is useful, even essential to social order but of what the categories are and where they come from, our discussion here joins with others on the politics of design. In a paper titled "Where are Designers," Mike Hales (1994) opens up a critical discussion of the problem of *location* with respect to a responsible practice of system design and development (see also Suchman 1994b). This discussion encourages us to ask the question of just how we are variously positioned as designers of new technologies, and what implications our specific locations (geographical, professional, organizational and so forth) have for the artifacts we produce. This is, I believe, one way in to the kind of analysis of institutional and social orders in which technical systems are embedded that Agre calls for (p. 34). It moves beyond the question of whether we take up "a disengaged, analytical stance" or a practical one (Winograd, 1994, p. 192), to the politics of either. That is to say, we can now recognize both that a disengaged stance is always actually a view from somewhere else, and that practical involvement is never disinterested. Moreover, such locational analyses bring *us* into the picture, and I hope avoid the kind of constructivist sociological theorizing that Randall points to as the motivating ground for an ethnomethodological alternative. Achieving this kind of awareness of just how we participate in the institutions of technology design is a task equal to the most difficult technical challenges we face, and like the design of artifacts our success at any given moment will be approximate and provisional. But getting started

¹² I do not mean to argue that speech act theory, the Coordinator, or any other technology is inherently bound to surveillance and control, or even that surveillance and control are necessarily implicated in the structuring of "disciplines" (the latter might be more concerned with, for example, notions of efficiency – see Bogen, p. 82).

could lead us toward a more critical understanding of who we are and, in that sense, where we are in the social worlds of technology production and use.¹³

In this regard I question Curtis' premise that "[t]he primary evaluation of coordination technologies will be not on politics, but on performance" (p. 64). Performance evaluations presuppose some definition of what the objectives of a particular social/technical arrangement are and the definition of objectives is itself a political process. In his own response, Winograd reiterates that

The goal of the Coordinator (and more recent systems based in the same fundamental concepts, as described in Medina-Mora et al., 1992) is to enable a structure of interactions that is effective for coordination within an organization (1994, p. 192).

Despite the neutral voice from which this statement is made, I would argue that there is no single structure of interactions or measure of effective coordination within an organization. That is because organizations are not monolithic, consensual entities but heterogeneous, contested, more and less aligned networks of actors and agendas. Interests vary, sometimes even conflict, and some voices speak louder than others. As long as that is the case it seems obvious that organization members need to retain the right to question technologies that are effective at doing things if they have objections to the things that those technologies do, or to the ways in which "effectiveness" is measured.

Grudin and Grinter also seem implicitly to position themselves somewhere outside the organizations that are the objects of designers' actions, and take those organizations as homogeneous entities subject to a single rationality of change. Grudin and Grinter see the debate as one between "ethnography," an essentially descriptive enterprise, and "design," an essentially prescriptive one. They cite a recent paper of mine that recounts a move from feelings of inadequacy in the face of designers' demands for "implications" of ethnography to resistance to those demands (Suchman, 1994b, pp. 30–31). What is less clear from their citation, however, is the positioning of that passage within a narrative that described a subsequent move in which I and my colleagues have attempted to leave oppositions between ethnography and design, detached observation and engaged intervention behind in favor of a more deeply hybrid, collaborative and critical practice. I now consider myself neither an ethnographer nor a designer, but sometimes one, sometimes the other, often somewhere in between. Similarly, I'm not sure how Grudin and Grinter find evidence in my writings that "[c]hronographers would have developers minimize disruption, as well" (p. 56) Ethnographers have long since abandoned the idea that theirs is a purely descriptive, "nondisruptive" practice.¹⁴ My proposal in the paper that Grudin and Grinter cite (Suchman,

¹³ For an eloquent argument to this effect see Markussen 1994.

¹⁴ See for example Clifford and Marcus 1985.

1994b) is not that developers can, or even should “minimize disruption,” nor do I present “a case against change in a law firm” (p. 56). Rather, I propose that developers recognize what is being disrupted in the various enterprises of design in which they are involved, and in whose interests. Moreover, I argue rather passionately in that same paper for disruptions of the status quo, specifically in the institutional arrangements and working relations within which design currently gets done. Conservatism, like beauty, is in the eyes of the beholder: I personally hold business process reengineering, for example, to be deeply conservative. It is, to my mind, a question of who is disrupted, and to what ends.

As Lynch points out (p. 67), and as I suggested earlier, the voice in which Winograd speaks is an identifiably managerial one. He is certainly not alone in this within the computer science/system design community, nor is such a voice inherently a problem. Pace Malone (p. 38), I do not mean to make “manager” into a demonic category in my analyses, but neither do I mean to make it an heroic one. And I do want to point out that the managerial, or designer’s, voice is too often simply there, as an unmarked perspective assumed to be shared by others (or at least by those others who comprise the audience for our writings). This makes it difficult to locate the specific interests represented in the CSCW community, much less those that are left out.

The problem lies in our common failure to demonstrate any self-consciousness about the voices with which we speak and, commensurately, of those that are absent from design discourse. I myself am struggling to understand how my positioning as an anthropologist within a prestigious computer research center provides me with a specific, historically and culturally constituted identity, which in turn systematically opens up access to some social worlds and closes off access to others. I’m specifically concerned at the moment with how I might develop new working relations, beyond those readily available to me, not only with individual “end-users” of technologies but with forms of association (for example, the National Association of Working Women, or Service Employees International Union/SEIU) that represent the interests of those who do the everyday work of organizations rather than only with those who manage it. But that is another story.

David Bogen suggests that rather than raising questions of organizational politics where Winograd and Flores would set them aside in order to get on with the business of design, I am “walking through a door that was opened by Winograd and Flores in their book” (p. 81). I think this is right and that I feel able to do so both because of the strength of my “deeply felt political concerns” (Winograd, 1994, p. 191) and of my enduring friendship with and admiration for Terry Winograd. As I said in an earlier review of *Understanding Computers and Cognition*, the primary contribution of that book is to open up the pragmatics of system design to a more extended theoretical and political landscape. My aim is to open the door further, and to invite others in the CSCW community to step through it and join the discussion.

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