Relevance conventions and problem boundaries in work redesign teams

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Introduction
Participatory and cross-functional teams have become widespread means of assessing organizational requirements and change directions. The quality movement, business process re-engineering and alternative system development methodologies have all contributed to the emergence of this practice (Clement and Van den Basselaar, 1993; Greenbaum and Kyng, 1991; Hammer and Champy, 1993; Katzenbach and Smith, 1994; Schein, 1985; Yates and Orlikowski, 1992). The very merit of the cross-functional work redesign or system development teams – their diverse group composition – presents its own challenges.

The notion of “Communities of practice” (Lave and Wenger, 1991) and other concepts of shared workplace knowledge tend to focus on longer term collectivities that have developed a background of tacit practices guiding activity and everyday decisions. The cross-functional team by definition lacks a portion of this common background. Although members do share experience in the larger organization they deliberately are drawn from different organizational milieux.

Since the shared background is a seamless “web” (Kling and Iacono, 1989; Wynn, 1979), it holds many dimensions of practice, including conversational conventions, “common knowledge”, ranking systems, actual task practices and operational focus, priorities, a lexicon and a general organizational “viewpoint”. In the cross-functional team the background must be forged against the backdrop of:

- a change direction;
- uncertainty about the extent of and commitment to change;
- different and possibly conflicting interests and stakes;
- a new informational and decision context; and
- historical organizational cultures.

Knowledge and conversation
A fundamental notion of our work is that knowledge is co-produced in conversation rather than being a matching up of pre-existing separate
This is not to say that participants come to a conversation with nothing in their heads, but that how the conversation evolves is a co-operative and negotiated effort, and that participants bring to the discourse a huge grab-bag of possible topics, “information”, perspectives, refinements, experiences, recollections and multi-dimensional sub-features of recollections that could connect to the discourse in many different ways. All the above are altered and reframed in the ongoing dialogue. This is the premiss of language-in-action social theories (Garfinkle, 1974; Schutz, 1970).

Every conversation is in this sense “exploratory” even if the only finding is that things have not changed since the last conversation. Team conversations are thus inherently complex, and conversations in cross-functional teams even more complex because of the lack of known correspondence of assumptions, associations and conventions (Schein, 1985; Sutherland, 1995).

The study
We have undertaken to identify some of the conversational issues in the production of knowledge in cross-functional work redesign groups (Novick and Wynn, 1992; Wynn, 1991). Our material is two hours of video-recorded meeting, from which we selected a subset of activities to illustrate what may be key sources of miscommunication based in differing conversational conventions. In this paper we focus on the establishment of conversational relevance.

Since conventions are backgrounded, they have the possibility to reveal by assumption what tends to be denied in explicit purpose: the not exactly equal recognition of “authoritative knowledge” among all members of a team. Jordan’s (1992) discussion of this phenomenon is based on clearly hierarchical and authoritarian medical settings. By contrast, the cross-functional team sincerely aims at equality and is based on the premiss that all participants have valid contributions to make (Katzenbach and Smith, 1994; Schein, 1985; Wynn, 1979). Nevertheless, differences in the perception of authoritative knowledge or effective contribution are common to many group settings because of various subtle differences among participants (Sutherland, 1995).

We postulate that the recognition of relevance (Grice, 1989), and by extension the recognition of a valid contribution, is influenced by the manner of discourse or speech style (Gumperz, 1971; Gumperz and Hymes, 1964). Ranking individuals tend implicitly to set the style, although the ranking person is not necessarily a facilitator. Since style and speech conventions are almost never deconstructed in these settings, or are addressed only by means of a challenge to order (Bloch, 1975), the issue of how relevance is determined tends to remain deep in the background with no means for participants to address it explicitly.

From this background, we maintain, implicit notions of relevance based in professional and managerial styles of discourse can easily exercise an influence on uptake, non sequitur change of focus, or outright rejection of contributions to a “topic”. Topic itself is a fluid matter, depending on how contributions are seen explicitly or implicitly to tie to a co-constructed theme or valid association. One
feature of managerial and professional discourse style is to be explicit about how what is being said relates to the topic. By contrast, operational-level employees make more frequent use of illustrative accounts and implied connections to topic (Andersen and Holmquist, 1991).

To illuminate the problem of relevance in cross-functional teams, in this paper we take up the issues of “what is a topic?” and “how is a relevant contribution to the topic discerned?”. We use some incidents from the meeting we studied (Wynn and Novick, 1995) to illustrate the slippery notion of topic and its accompanying conversational regulator, relevance.

Constructs employed in the analysis
Before providing examples, we will discuss the constructs used to analyse them. From our combined experience with interaction analysis, we had on hand a toolkit of conversation analysis constructs (Austin, 1962; Bloch, 1975; Garfinkel, 1974; Goffman, 1959; Gumperz, 1971; Gumperz and Hymes, 1964; Jordan, 1992; Schegloff, 1972; Schegloff, et al., 1977; Searle, 1969; Wynn and Novick, 1995, and more). We also had a notion about the relationship between speech style and the uptake of discourse accepted thereby as relevant (Wynn and Novick, 1995).

Part of our interpretive scheme was our own implicit model of participatory work. As we viewed the tapes, we scanned for discourse events that “broke down” (Dreyfus, 1991), in our judgement, before identifying the expectation that defined the nature of the breakdown and its corresponding construct. These could be apparent misunderstandings, failed topics, mismatched assumptions, discrepant uses of terms, and noticeable interruption of directions or turns (Novick and Wynn, 1993, 1992).

Language-in-action theories are eminently applicable to studies of participatory design, in that they disclose the mechanisms by which information is developed, exchanged and produced co-operatively in dialogue. These theories originate from more than one source, in terms of both discipline and philosophical stance (e.g. Austin, 1962; Garfinkel, 1974; Grice, 1989; Schegloff et al., 1977; Schutz, 1970; Searle, 1969).

However one might wish to maintain an orthodox line in using them, there are times when more than one approach has something to offer. Winograd and Flores’ (1987) Understanding Computers and Cognition, for instance, suffered from the difficulty of setting up a premiss in phenomenology and then trying to implement it using analytic philosophy in the form of speech act theory (Austin, 1962; Searle, 1969), a contradictory framework.

Since we use contradictory perspectives in our own search for a method of understanding participatory design conversations, we acknowledge that there are further discussions to develop behind what we present here. This general contradiction is addressed by Dreyfus (1991) throughout Being in the World in frequent references to analytic philosophy and specifically to Searle, demonstrating that the two perspectives relate to each other if only by contrast and impinging on the same domain (Dreyfus, 1991, p. 142). Dreyfus quotes a
statement from Heidegger’s phenomenological perspective concerning the common construction of the shared “world”:

In order to give a more accurate portrayal of the phenomenal structure of the world as it shows itself in everyday dealings, it must be noted that what matters in these dealings with the world is not so much anyone’s own particular world, but that right in our natural dealings with the world we are moving in a common environmental whole (Grice, 1989, p. 26).

We rely on this concept to explain why it is important to understand the differences in conversational conventions among cross-functional team members. From these conventions will emerge their “common environmental whole”, which is both the framework and the outcome of the discourse. In developing this conception, we have used analytic tools that show where those “dealings with the world” are not shared and in fact continue to diverge because interactants do not share the very practices that create convergence: conversational conventions.

Grice’s notion of the co-operative principle in conversation, from the viewpoint of analytic philosophy, is a useful tool we adapted for our purpose. Grice observes that what makes conversation perceptible as a shared activity that is not the property of individuals separately but emerges in their co-operative dealings in conversation:

Our talk exchanges do not normally consist of a succession of disconnected remarks, and would not be rational if they did. They are characteristically, to some degree at least, cooperative efforts; and each participant recognizes in them to some extent, a common purpose or set of purposes, or at least a mutually accepted direction … But at each stage, some possible conversational moves would be excluded as conversationally unsuitable. We might then formulate a rough general principle which participants will be expected (ceteris paribus) to observe, namely: Make your conversational contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged. One might label this the Cooperative Principle (Grice, 1989, p. 26).

While Heidegger and Grice start at different places, especially with regard to the issues of representation and preconception, they both address the area that concerns us in this paper. Heidegger’s statement that “right in our natural dealings with the world, we are moving in a common environmental whole” addresses our premiss that the output of a conversation is entirely a function of the conversation itself rather than a summary of pre-existing knowledge states or representations brought there by participants. Grice’s statement (although fundamentally representationalist in its premiss) addresses the means by which that conversation moves towards its commonly (and ongoingly) defined goals in a reasonably orderly manner, given the infinite possibilities present in it.

The limitation of philosophy of language frameworks is that they tend to look for general logic and thus fail to address cultural differences. Therefore we also use cross-cultural notions of speech behaviour, such as the speech community, speech event, and other constructs (Gumperz, 1971; Gumperz and Hymes, 1964; Schegloff, 1972, Schegloff et al., 1977; Wynn, 1991). Both Heidegger’s “environmental whole” and Grice’s “accepted purpose or direction of the talk” are constituted differently for different subgroups of people. These subgroups
define themselves in terms of locally graspable relevances and realities so that they share understandings within common local frameworks rather than global and general ones.

These local frameworks concern us in considering cross-functional teams. We used both these premisses to understand how communication works in the domain; the premisses intersect to give rise to the problem: the one as to how a conversational outcome is produced and the other for a specific criterion by which to judge progress towards that goal in an egalitarian setting.

**The “cooperative principle”**

Grice (1989) defines the “cooperative principle” in terms of categories of quantity, quality, Relation and manner. Under these categories he elaborates conversational maxims.

The quantity maxim is to make your contribution as informative as needed and not more so. Otherwise, hearers may start looking for a point in your over-informativeness and infer some additional, unintended meaning from it. The quality maxim is basically to be truthful or at least “do not say what you believe to be false” and, more to the point for our purposes, “do not say that for which you lack adequate evidence” (Grice, 1989, p. 27). The category of relation has one maxim – “be relevant”:

Though the maxim itself is terse, its formulation conceals a number of problems that exercise me a good deal: questions about what different kinds and focuses of relevance there may be, how these shift in the course of a talk exchange, how to allow for the fact that subjects of conversation are legitimately changed, and so on. I find the treatment of such questions exceedingly difficult.

It seems that natural speakers also find the treatment of these questions difficult, when differing cultural backgrounds and definitions of the situation are at play in the determination of relevance. Finally, we have the category of manner which relates to how things are said, in which Grice includes the supermaxim, “Be perspicuous”, and sub-maxims such as:

- Avoid obscurity of expression.
- Avoid ambiguity.
- Be brief (avoid unnecessary prolixity).
- Be orderly.

For Grice, manner has nothing to do with speech style, which is a sociolinguistic concept. Some of these matters are handled differently, and exemplified very nicely in the ethnomethodological literature (Garfinkel, 1974; Jordan, 1992; Schegloff, 1972; Schegloff et al., 1977). However, there are aspects of Grice’s framework that highlight specific issues in the situation at hand.

It is important to remember the specificity of these conventions to particular “speech communities”, so that it becomes possible inadvertently to violate implicit maxims unknowingly in groups that lack shared backgrounds of practice and their corresponding conventions of communication. The very
awareness of this lack of common framework is an inhibitor to some participants. For others, the familiar default conventions of similar situations in more traditional organizational settings serve to mask differences among the subgroups in the cross-functional team. Thus differential performance is attributed to a difference in interest or ability to contribute.

The cross-functional team
The cross-functional team we observed was part of an ongoing organization-wide effort to improve work processes and telecommunications service provisioning in a large regional telephone company. As is generally the case in the industry, change is a necessity of the times, resulting from new regulatory and market requirements, sharply increased competition and decreasing revenues. Within nine months of the meeting we observed, the company had imposed an across-the-board budget cut and laid off thousands of people. In the meantime and subsequently, the company continued to search for solutions to workflow problems through a variety of contemporary methods.

This particular team involved ten to 12 participants at three operational levels from several departments and geographical territories associated with T1 digital telephony implementation in a metropolitan area (the Telco). A research and development group (R&D) was part of the effort to find suitable methods for work process improvement. Three of the team participants were from R&D.

The facilitator, Sandra (all names are pseudonyms), had been drafted into R&D specifically to be a facilitator. She formerly held long-term operational assignments in the Telco. Another participant, Sol, who took an indirect facilitative capacity in this group, was also a long-term Telco employee from the line organization who had moved to R&D to facilitate similar teams. The third participant from R&D was a social scientist with a charter to explore participant-based views, accounts and facilitative methodologies for long-term innovative workforce development.

Tone of the team
The general situation of the team was one of coping with novelty, finding the common ground for discussion and making the best use of the distributed knowledge of the members. It is impossible to keep departmental interests out of such discussions, but overall the members of the group were not in positions of inherent conflict such that their work together would threaten each other. However, there were interdepartmental constraints and breakdowns; and during the meeting there were open and candid discussions about matters where departments had run into difficulty with each others’ procedures and practices. An emergent function of the meeting turned out to be the clarification of these issues. The group was basically egalitarian in composition and in general mood. The lowest-ranking person was a lineman and the highest, apart from the R&D people, were first-level supervisors or managers.

There were some signs of status discomfort from members with slightly lower status – the lineman’s self-introduction appeared embarrassed; and a
murmur of sympathetic-seeming laughter occurred when he introduced himself. An administrative assistant for an engineering group, Janelle, reported on a meeting she had managed with another group, using tentative language and intoning many statements as questions, even though her presentation was competent and her mission had been successful. For a while we thought the man next to her, who seemed to be sanctioning her presentation, was her manager, but he was one of the R&D facilitators, Sol. These are normal occurrences; in any setting some participants may feel at a disadvantage with respect to others.

Janelle illustrates below an attempt to define the conventions of the meeting. The nominal topic at the time was to establish so-called “norms” for the behaviour of the group. The norms under discussion addressed interpersonal behaviour such as making “I-statements”, not making “you-statements”, and other techniques to defuse the possibility of the meeting’s being derailed by friction between individuals. During the discussion on “norms”, Janelle burst into vernacular expressions to emphasize a point made by the group, as if suddenly breaking free from the constraint to conform to an uncertain standard of meeting behaviour, which appeared to have taxed her during her earlier formal report to the group.

In the “outburst” she uses both lexicon (“chill out”) and style (emphasis, drawing words out, heavy inflection and body language) to demonstrate or create an opening for a convention that would be more comfortable for her, and presumably some of the others. Her opening statement attempts to be uncritical (“We, I think we’re at ease right now”) but her final comments in the segment reflect her feeling that the group wasn’t enough at ease. Sandra’s comments provide a counterpoint of “rational” discourse (“Okay, since we’re going to list this as things that we all can do”) which act as her own normative demonstration of group conventions:

(Sandra asks for suggestions of additional norms)

Janelle: We, I think we’re at ease right now, but I would say putting the group at ease, so they can participate, ’n—

Sandra: Okay, since we’re going to list this as things that we all can do— can we say that Janelle in a way that— um— keep the group at ease, or—

Janelle: Stay friendly?

Sandra: Stay /friendly/)

Sol: //Relax//

Janelle: Relax, yeah, relax, chill outtttt, (exaggerated inflection, bends forward towards lap, laughs).

In a microcosmic way this exchange illustrates a general tension between the more proper tone the facilitator seems to want to use, by asking Janelle to restate her suggestion, and the urge behind Janelle’s original statement, which could be glossed as “be natural”. When Sol chips in to phrase it in a way that is closer to her meaning, Janelle momentarily “lets it all hang out”, suggesting that
the meeting imposes a style constraint for her. Sol, as a member of R&D, thus was able to sanction Janelle in her attempt to state a looser convention than what she had perceived as the norm.

As further confirmation of the contrast between the conventions available to the participants and those used in the meeting, we use the example of break behaviour. Of course, any group will have a "backstage" versus "onstage" language code (Goffman, 1959). The question is, how far apart are they and how constraining is the onstage code? On the break, we saw participants speaking in small groups and behaving more expressively and candidly than they did in the official meeting. Two women within view of one of the cameras used exaggerated facial expressions, head-tilting, fluttering face-level hand gestures, a gagging gesture and high-pitched speech, none of which had been seen in their meeting behaviour. We view this as a form of sideline bonding. They had not met before and did not address each other during the meeting. These distinctions between meeting and break behaviour as a genre are normal (Goffman, 1959; Kinderman, 1994), but again point to the fact that the meeting had implicit parameters of discourse style, while the break brought forth other, more vernacular styles that were available and natural to the participants.

The meeting style was never defined, of course. It is this tacitness that we noted as a limitation on the contributions of some participants. Janelle's behaviour experimented with liberties while appearing to us very conscious of a standard of presentation. Others may have been more constrained throughout. The lack of common understandings about acceptable styles of meeting discourse presents a disadvantage to those who have less command of formal styles (Beath and Orlikowski, 1994; Bloch, 1975; Gumperz, 1971; Gumperz and Hymes, 1964). Since the acquisition of meeting style is part of the secondary socialization of professional/managerial training or experience, higher-ranking people are more conversant in this mode.

While repertoire range (Gumperz, 1971; Wynn and Novick, 1995) may be no greater for the managers than for linemen, there is a perception that the formal style is preferred and credible. Therefore using this style as a default has more restrictive impact on those who rely on vernacular styles, in settings like this one, than on those who are at ease with more formal styles. In other settings, where working people are "at home", higher-ranking people may have to prove they are "for real" and suffer from their inability to command vernacular language. This often happens in field research situations (Wynn, 1991).

**Tacit contradictions in the meeting context**

The facilitator made frequent mention of a "core team" to which all concrete suggestions were to be conveyed. This was an umbrella group that reviewed the suggested changes to work process produced by a set of work process teams. From our understanding, the institution of teams was widespread but by no means established or reliable. One or more teams we had hoped to study dispersed before a video-recording could be set up. The charter for teams was
thus not entirely clear to us. We suspect that the team itself was tentative about its charter.

The regional telephone companies are characterized by historically long-term predictable employment and a command-and-control management structure based on a large and unthreatened monopoly. Changing the culture of the industry from conforming to competitive, and from stable to innovative, has been a major effort in every regional operating company. The teams were a part of this effort. But it is impossible to avoid the contradictions between familiar established expectations of "normal" performance and the drive to innovate (Sutherland, 1995). This stress was most obvious in the struggle to define the situation that emerged towards the end of the meeting between participants and facilitator.

There was no obvious display of authority, although there was an ongoing effort by the facilitator to keep the meeting to an agenda, putting her at cross-purposes, as it turned out, to an exploratory direction the meeting took naturally. Aside from verbal interruptions and frequent requests for bullet-point summaries, she made use of non-verbal means such as standing up, pacing, removing the cap from her marking pen and placing her hand on the flip-chart paper during others' turns.

In follow-up discussion both Sandra and her colleague from R&D, Sol, affirmed the need to keep the meetings "on track". Otherwise, in their opinion, the group would digress indefinitely. Our interpretation of "digressions" observed in this meeting was that they were attempts to understand issues in depth, so as to be equipped to tackle the problem of redesigning workflow. Interest in other departments' procedures and practices was a natural outcome of breakdowns experienced in the course of working. Moreover, in order to narrow down the boundary of what the group could hope to accomplish, they would need at some point to over-extend it, in order to know where the boundary was. Some of these explorations resorted to informal means of expression. Thus they gave off double cues to the facilitator's filter for relevance, which was guided by the question "What do we report to the core team?" The first cue was the absence of a convention explicitly tying relevance to an expected artifact of outcome (the bullet points). The second cue was the appearance of going beyond the charter by exploring issues not within the nominal topic boundary.

The presence of the core team thus emerged as an accountability factor for the facilitator, who made regular queries as to whether topics under discussion constituted directives to the core team. This pressure turned out, in the meeting we reviewed, to run counter to the group's natural inclination to explore topics on the table and engage in the level of learning they would need to reach in order to suggest meaningful changes.

**Definition of the situation and relevance**

An emergent feature was that the meeting presented a unique platform for some of the participants not only to describe functions but also to produce
ITP 9,2

distinctions to formulate a defence of problematic situations. Thus struggle for control of the definition of the situation occurred both at the level of the “speech event” (Gumperz and Hymes, 1964) — participant-based discussion versus means of producing a list of action items — and the “speech act” (Austin, 1962; Searle, 1969) — “factual” presentation versus persuasive opportunity. The tacit nature of this conflict put the facilitator regularly at cross-purposes to the group, with no means to address the underlying issue (Wynn, 1991), which sharply distinguished differing views of relevance.

Towards the end of the meeting, the manager of parts inventory had been invited to give a “presentation”. There had been some general problems with supplies of parts, and team participants were interested. The inventory manager had a unique opportunity to present the complexities of parts inventory so that others could understand, sympathize and also participate in a co-construction of appropriate practices to deal with some near-term unavoidable constraints. The majority of the group engaged in the parts discussion well beyond the time allocated to the subject.

Our model of workflow redesign process would acknowledge that the teams need to lay out a larger problem-space than the one they will actually solve, in order to provide context and know that the boundary includes most of what is relevant. Additionally the political import and personal investment in interdepartmental topics has a momentum of its own which cannot be denied its occasion. Hence, to us as observers, the fact that this topic overflowed its time seemed unproblematic, indeed creative.

These two emergent conversational imperatives, exploring the problem boundary and making a credible presentation of a department’s complexities, conflicted with the way the meeting had been structured, to the point that in the conversation following we must ask “whose meeting is it?”. While Sandra is the individual who continually tries to stop the flow, it is her accountability for the process and how this accountability has been set up and communicated to her that provides stress in the situation. At one and the same time, she presides over a change process that opens up a flow of meaningful conversation, and she shows the constraint of her role to “manage” it and “produce results”. Thus she faces a dilemma which her facilitative training and her organizational role have not prepared her to resolve.

In the transcript below, Pete is the inventory manager; other participants come from departments which order parts. A long and structured presentation has already occurred as planned (15 minutes allocated) and the conversation now winds up in the area of budget for parts. During the discussion two people have offered testimonials to Pete and his co-operativeness, suggesting ways to circumvent predictable difficulties in parts supply as practical workarounds to existing unresolved problems.

Comments in the text between ( ) are our glosses of the dialogue. Bracketed numerals, e.g. [i] indicate a count of Sandra’s attempts to invoke the brevity maxim in terms of the speech event she is engaged in — collecting action items for the core team. Corresponding numeral-characters [i-a] are the counter-
attempts of participants to maintain the speech event they are engaged in, finding out all about parts inventory. In terms of Sandra’s event, the discussion is one large irrelevant digression. Yet in terms of the co-production of topic by the team, relevance is continually reaffirmed by the mechanisms that revive the extended rather than the core team-focused discussion:

Janelle: This has been escalated in your department, right?

Pete: It’s been escalated in my department.

Janelle: I know you’ve been down to our floor, I know you’re talking ta Danny and I know we came up with procedures an all ‘at kind of stuff because of your floor situation, but it doesn’t solve your … money problems.

Pete: (Was planning on 20 cards a month but with Just-Say-When we’re suddenly using 40-50 cards a month. Explains, sorts out between vendor delays and funding-based problems. Differential supply of cards, delays on getting cards due to manufacturing cycles.)

Angela: What level has this been escalated to?

Pete: I know it’s past District at this point.

Sandra: Right, so I guess the question for the group is there any information that Pete can provide that would be helpful t’you, number one, and number two … is there anything about the discussion that has taken place that uh … you would like to take … to the Core Team? by way of sharing information, uh … or, or not. So … in the first place is, is there any more information that you need from Pete or anything else … (looks around), uh, OK. Does, uh the group … //want to do anything//

Ben: [i-a]//Just one quick question//

Pete: Yeah.

Ben: Does that mean that … because of Just-Say-When we’ve doubled the number of circuits we’re putting in?

(T he group resumes the inventory topic. A little later in the discussion, we get three more attempts by the facilitator to close the conversation.)

Ben: Well I was under the impression that, when an order was cut, they first got the card.

Pete: My supply of stock is not strictly for provisioning – it’s for provisioning, it’s for maintenance. (Clarifies who he serves and how they behave – different behaviour on the part of supplyees – some submit plan – either because their work allows it or because they take the trouble to, others don’t, but all equally get service.)

Ben: (Each building would have a spare count, an inventory database.)

Pete: (Explains that spares are used for some purposes, not for others.)

Loren: Well actually we could look at the bright side a’ dis, at least we’re makin’ money someplace.

Pete: We’re makin’ money someplace.

Loren: It – it’s, y’know we’re selling something.

Sandra: [ii] Ya, which isn’t really a question in itself. Is there anything that the group wants to take to the Core Team meeting next Tuesday in terms of uh, what Pete has described?
Loren: Just give him more //money.//

Janelle: //He needs// money for the lo -, the um, cards.

Pete: [ii-a] (Explaining the process:) He needs that money for certain cards. Other cards, like your T1, comes out of the general fund, out of supply. Even though the usage has gone up, I had money to handle that, and I’m handling that side for your T1’s. The issue there is, don’t call me up today because you need cards tomorrow and you’re down to your last card with the T1s. When you get halfway through what you have in stock, you gotta husband your own stocks a little bit, say “hey you know I’m using these up at a quicker rate than I thought”, because when I’m sending you fifty at a time, I don’t see what’s going on. It becomes a blind spot. I don’t know how those fifty a month – are you still sitting on fifty a month are you down to your last one. I don’t know that, when you’re down to your last one, I don’t know that ... until you call me at the last minute. You suddenly start using a hundred a month (goes on with this; recaptures his reasoning process).

Sandra: [iii] Pete, this sounds like a recommendation of a procedure that could be captured and put into the minutes ... and uh, I-let’s see what, what it is.

Pete: [iii-a] It’s like if you get into an urgent demand situation. You get into a problem. I get this all the time. I call it my Friday night four o’clock urgent demand.

Janelle: That’s awful.

Sandra: [iv] (Hand on the flip chart paper) How can we capture this, we are running out of time, I just wanna capture the procedure and then again ask if you want this to go to the Core, who is who’s going to take it and ... do you have all the information you need to do that. So, the procedure is that, is it engineers who are monitoring this? Or foremen, we’re not clear.

Pete: It depends.

Sandra: Could be both?

Pete: Yeah.

Sandra: Okay.

Pete: Yeah, they all monitor it.

Sandra: So engineers and ... outside plant foremen.

Pete: [iv-a] (Back to explanation, dialogue continues.)

Relevance is an explicit issue in Sandra’s attempt to cull specific bullet items that could show up as deliverables of the session from the ongoing talk. Despite a lengthy and desultory classroom-style presentation of “norms” on fair ways to disagree which took up the first hour of the meeting time, the assumed and unexamined character of the “speech event” in question left room for conflicting definitions of the situation.

In terms of real “norms”, better termed as constraints, it seemed clear (from the meeting and subsequent discussion) that Sandra was guided by historical organizational rewards, punishments and definition of value according to measurable outputs. She oriented her actions to the outcome of the meeting, focusing on bullet items as a reflection of her own performance. (Her private dialogue disclosed this concern as well.)
However, the team’s charter to redesign a work area could not take an entirely predictable course with a given set of “deliverables” at the end of each meeting. The facilitator’s notion of relevance was continually guided by the regular production of action items, whereas participants followed a path of relevance more closely developed turn-to-turn within the topics themselves.

Relevance, “topic” and style

Certainly the existence of a tacit conflict over relevance at this level – the level of the entire group’s discussion – may have reflected difficulties of relevance at a deeper level, the level of discourse style. We have quoted above a short transcript in which Janelle explicitly stated that. This level of relevance control, relevance as a function of style, ran as a subtext to the more obvious conflict over the definition of the situation.

We contrast a vernacular style of contributing to a topic as being more oriented to illustrative stories in which context is presumed and the story takes the speaker’s point of view, with a professional style that conventionally structures a meeting turn in such a way as to make explicit the connection of talk to the topic at hand. This may be done by drawing an abstraction from the theme, citing the point or case example, and then redrawing the connection, in a micro version of how arguments are generally constructed (Andersen and Holmquist, 1991).

For instance, in the following short introduction of Pete, Angela, a first-line manager, produces some of the elements of the logically connected turn, even though she still uses informal locutions to express herself.

Angela: The statement was made that DPI is not aware of what cards PICS has on back order and that's why ... we're in the mess ... that we're in. So I invited Pete here so that he could more or less explain quickly how his operation works. And then Janelle, maybe you can um bring up how your side of the house works and why the CO is always short on cards. We have to scramble, we have to beg, borrow and steal from uh from other buildings and the other buildings don't have any either.

Nick: Happens all the time.

Angela: Well, maybe Nick ... You wanna bring up an example?

In her introduction, Angela connects what she is about to say to a past topic context, redevelops a logic from that, and sets that up as a basis for having invited Pete. She then predicts the order of events, since she is at this point in a leadership role with regard to the topic she is introducing. In many ways, Angela’s style reflects an example of a level of formalism intermediary between the other two styles in the meeting. She structures her turn logically, but her manner of expression is somewhat vernacular, “that's why ... we're in the mess ... that we're in”, and further, “we have to scramble, we have to beg, borrow and steal from the uh other buildings”. So it is not the use of vernacular terms in themselves that works against the perception of relevance, but rather the use of informal illustrative turn structure.
T he communication topic: two turns that failed to connect

To examine this we will use three small incidents in the course of the meeting. They arose when participants were reminded of their responsibility to communicate meeting results to their work groups. All three incidents were related to a general topic of “communication”. The first two incidents were essentially failed turns, while the third incident validated our observers’ perception that those two contributions were seen by at least some participants to be relevant to the discussion despite their failure as turns. Our hypothesis was that the turns failed because of the format in which they were presented. In the meeting they seemed to occur as non-sequiturs, judging by how they were handled. Yet to us they tied in to the topic in a sensible way and indeed could have opened up important areas of discussion, had participants drawn out an abstraction from them rather than leave them as stand-alone stories.

If the illustrative mode of topic connection is common in a group, then participants look for the keys that tie the story to the general theme, and a wider range of associative stories may be allowable. A story tends to take longer than a generalization and may also implicate individuals or groups more directly by being specific. Ambiguity comes in when the connection to the topic is not made explicit up front. Thus ambiguity exists for participants who are expecting explicit pointers in the introductory remarks as to where the speaker will take them. Different views of orderliness are also involved in the structure of each turn (Bloch, 1975).

Topic is difficult to define and control under the best of circumstances (Grice, 1989). A topic problem began in this meeting when participants were reminded of their duty to “communicate the results of the meeting back to their departments”. Members occupied different ranks and came from departments of different composition. Even location was problematic for groups like installers. Thus the requirement to communicate results ignored many organizational realities. At the same time, it served to bring them out on the table.

The participant who saw himself least able to carry out the communication responsibility, because he clearly lacked the authority to call a meeting or disseminate a memo, not to mention always working in the field, spoke up at once about the problem this presented to him. He was not even sure he could contact his manager or get him to communicate as requested.

After he stated his difficulty, the conversation dispersed into the general problems of communicating in the organization, given “today’s changing environment” (people moving around, changing roles, much reorganization). From there, several threads ensued, and two people contributed stories about what seemed heartfelt issues for the Telco people in general: problems communicating in the organization.

The first story was from Angela. She reported that in the context of trying to provide customer service, effectiveness was impaired because a manager in another group whom we call Hamill “doesn’t get back to you” when you call him. This personal criticism of the other manager seemed to be one of several
sticking points in the story, along with the Angela’s tone of frustration and complaint. One participant offered that she “knows Hamill’s group well”. A n R&D participant interjected that “I don’t think now is the time to go into that” and tried to return the floor to a less controversial theme of the communication topic. Yet co-ordination with other departments and eliciting their co-operation was an ongoing theme in the group’s work. The problem with the contribution was its story nature, its heatedness and its naming of names.

The second story was about how difficult it is (implicitly connected to the context of not knowing where anyone is in order to communicate with them) being dispatched from one job to the next, with the implication that people are not allowed to finish what they are doing and time is wasted having to return. This was another take on communication difficulties, which is that communications are interrupting workflow; and thus it is virtually impossible to find anyone who does site work because of this. A generalization that could have been made is that dispatching is too chaotic and event-driven. While the intermediate topic was “how hard it is to reach people”, the story related the flip side of that problem: how difficult it is not being allowed to stay in one spot, and therefore how hard it is for the speaker and others in their job category to receive communications.

For the purpose of developing our theme, what was important about both turns is that they came from operational participants and they took the form of stories rather than having explicit introductions, connections to the theme, development and reconnection back to the conversation. They started up as accounts and ended that way, with the listener left to draw the connection, which was implied by the occurrence of the story in the turn.

The contradiction between substantive relevance and the stories’ lack of success as uptake turns probably resulted from their form. While the team “norm”-setting process had taken an hour to establish the psychological basis for “fair” participation and “not taking things personally”, there were no ground rules about the form of contributions. Nor would there be, since this is backgrounded. People do not consciously talk according to “rules” of conversation. The conventions tend to be the product of group practice. What was lacking was for the people who saw the relevance of the stories to tie them to a higher-level theme so that they “occurred” as relevant for the whole group. In fact someone did draw the connection; but he did so as a backstage (Goffman, 1959) act of repair, not as part of the meeting.

It is true that many turns at talk die a similar death. However, we conjecture that there is a pattern to the uptake of contributions which closely follows the principles illustrated in this example: that contributions are perceived on the basis of form at least as much as on substance, and that the forms perceived as relevant for a meeting are different from the forms for casual talk. Further, all “participants” in a team like this one do not command the forms for meetings. Participants who spoke in story form adhered to another of Grice’s maxims, the maxim of quality: “do not say what is not true, or what you do not know to be true”. Since a knowledge differential in a cross-functional team is bound to exist,
and since rank is a key validator of authoritative knowledge, then it is risky for a lower-ranking participant to venture generalizations (what is needed for the meeting convention) that he or she does not know to be true.

Grice's supermaxim of perspicuity and the submaxims to avoid obscurity of expression, ambiguity and unnecessary prolixity (taking too long to make your point) and to be orderly, all come into play as having different instantiations for different groups. As well, Grice's maxim not to say what you do not know to be true could contribute to less explicit generalizations or abstractions tying the examples to the topic, since some speakers are certain about details but less certain about generalizability.

**Connecting implicit relevance as a backstage repair act**

Our sense that the turns had been overlooked was confirmed during a private discussion between Ben and Angela during the break. Angela's story complained about Hamill's “not getting back to her” and it had been cut short in several ways described above. What struck us was that this short backstage dialogue between Ben and Angela also tied the other dropped topic to this one. Ben's remarks link the stories and thus imply that both turns were well tied in to the communication topic, and by implication were dropped for reasons other than substantive relevance.

Ben: You talk about communications. The communication’s gotta get to this guy’s [Hamill’s] boss, ‘n he signs off, and overall ... there’s no communications problem.

Angela: Right, right ...

Ben: (laughs) It’s – he knows he’s supposed to do it. The overall stuff’s been there for umpteen years. He figures he’ll get away wit’ it, because the odds are -

Karen: (ally of Angela) He shoulda come back to us with that decision instead of supporting –

Ben: That’ll happen without him – the odds are that everybody’s gonna get it done -

Karen: Yeah.

Angela: It won’t come back to ‘im ... ‘n -

Ruth: (Interrupts to ask Ben for a phone number that’s in the T1 book in front of her. This is the second time she has intervened when Hamill was being criticized, previously having stated “I know his shop”.)

Ben: I had one of my guys just refuse to do an antenna ... He don’t wanna be dispatched ... from point to point. Because, we went out, they weren’t ready in the city, so now he doesn’t wanna redispacth when the city was ready. He says “run through the smart jack”. He refused the dispatch, to do the antenna -

Angela: So what happened?

Ben: Didn’t happen ... didn’t happen. Didn’t happen.

Angela: It’s not one a your guys’ fault.

Ben: Yeah, the city called the (installer), the installer, it’s the installer’s fault. He says, he says “let ‘em run through the smart jack. Yeah!”
Obliquely, Ben has taken the two stories, which occurred during the general discussion of “communication”, and linked them in this offline “repair act”. He opens his remarks to Angela by saying “You talk about communications ... ”. He then proceeds to answer her complaint about Hamill with a generalization about how things work in the organization. At one and the same time, he validates the truth and relevance of her contribution and contextualizes it as nothing unusual – something that gets handled in the normal course of business, by other means than the obvious ones.

This explanation had a place in the group’s discussion, in terms of actual topic. But Ben prefers to address it in backchannel mode, perhaps because it brings up more organizational “reality” than the tone of the meeting seems to warrant. In other words, although the meeting is about redesigning elements of workflow that don’t work, there is a sense that addressing the politics of the organization is off-limits (even though they are part of what doesn’t work). The same constraint was echoed in Sandra’s interruption of the discussion of funding for parts, which follows.

Angela: What level has this been escalated to?

Pete: I know it’s past District at this point.

Sandra: [i] Right, so I guess the question for the group is there any information that Pete can provide that would be helpful t’you, number one, and number two ... is there anything about the discussion that has taken place that uh ... you would like to take ... to the Core Team?

**Conclusion**

While based on limited data, we feel that the language behaviours disclosed in the foregoing analysis are both widespread and inhibiting to the work of cross-functional teams responsible for a variety of organizational change processes including information system development and workflow redesign. Discussions with many participants on redesign and re-engineering teams reinforce our view both that the problem exists and that it is too subtle to address with normal means. While the “norms”-setting exercise is an attempt to get at this, it tends not to release participants either from the organization’s prior system of evaluation nor from the implicit ranking system of the assembled participants. There is randomness as to whether groups solve this on their own by intuitively grasping the issue and/or having the franchise to deconstruct organizational habits of every kind.

The fact that criticism of organizational politics and of deep-seated problems remains perpetually on backchannels is really one of the purposes of redesign: the putative attempt to bring contextual knowledge and practice out of the tacit and into the explicit area of organizational awareness. However, confusion about what the redesign sessions are fundamentally about – their scope and conventions – and the default dominance of prior speech event distinctions subtly but persistently mitigate this purpose. A consultant writing to the business process engineering Internet list, bpr-l, summarized it this way:
I have chosen to consider the way in which the BPR team works together as the major element influencing success. In other words, I am choosing not to focus on what is done, but more on how it is done. Some of this is, in practice, problematic. It asks the management team to behave in a facilitative manner, possibly against the existing culture.

... There are likely to be all sorts of issues in the management team that undermine true teamwork ... I usually have to start with senior management and, when I go beyond glib agreements, find that there are usually real differences in opinion as to what the BPR exercise is for. Arguably, the dynamics of the management team are reflected down through the organisation structure ... In short, in order to achieve full success in BPR, people may need to begin the process of behaving differently. Bringing about this new behaviour may well be one of the reasons for carrying out BPR in the first place. Catch-22? (Sutherland, 1995).

The difficulty of course is that this behaviour is part of the “background of practices”, not something people knowingly do. However, through methods such as the ones we have illustrated here, it is possible to get at the mechanics of the behaviours. Participants tend to have glosses or informal terms for the them but lack distinctions that would classify their observations as empirical rather than “subjective”. We intend through this and further work to draw the distinctions so they can be ready to hand in the process of re-engineering the team.

Summary

The topic crosses several disciplines and illustrates the importance of using a range of reference disciplines to solve applied problems. In this case, it is difficult to pinpoint the issues without making use of previously established constructs in sociolinguistics. Ethnography per se, and the ethno-methodological use of dialogue, have come to be more and more accepted in understanding social issues affecting the workplace and the development of information systems. But interaction analysis has been largely overlooked as a source of identifying problems in the current business use of cross-functional teams for the design of new business processes and of information systems to support them. Additionally the transcripts show us organizational ranking and boundary behaviour that might otherwise be explicitly denied. Our case example was one of relatively mild interference. The group essentially overruled the facilitator. However, such meetings can include more constraining power plays: when real rank is present, for instance, or when educational differences make it incumbent on one party to allow a vernacular tone to be set, because de facto they may set the tone.

There is every reason to believe that the phenomena we touch on here are widespread, tacitly understood, yet unaddressed due to lack of awareness of the frameworks and distinctions available to analyse them. It is possible to develop practical programmes to address the issues: by training software engineers, facilitators and managers to listen to vernacular lexicon and conversational conventions; by providing simple guidelines for the conduct of meetings; and by training participants, not to speak more formally, but to provide some conversational links that key other participants to the relevance of a story in an ongoing topic. In this way their valuable contributions are more easily taken up
and blended into the co-construction of topics. All participatory work comes
down to the quality of the conversation that constitutes participation; and that
is dependent in great part on the equality of the conversation.

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