'Slow'[1] Collaboration: Some uses of vagueness, hesitation and delay in design collaborations

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Abstract. This position paper points out some of the constructive roles vagueness, hesitation and delay play in the spoken interaction which takes place during collaboration in support of the early stages of design. These observations serve as a reminder that measures of the quality of a collaboration must be sensitive to the task-orientation (purpose) of the collaboration. Even aggregate measures (macro-level), such as duration, participation contribution distributions and frequencies, and so on, that we use to summarise the spoken interaction components of collaboration, derive from the micro-structure of the talk. Thus, in assessing collaboration quality, over-reliance on surface features without regard to the functions they play in their local context risks undervaluing some of the fundamental mechanisms that allow collaboration to take place.

1 Introduction

Close examination of talk-in-interaction is one important source of what we know about how certain kinds of work are achieved through social interaction (e.g. Drew and Heritage, 1992). The workshop's concerns are with *analyzing the quality* of task-oriented collaboration. In this paper I briefly draw on studies of

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[1]   Slow as used by the slow food movement originated by Carlo Petrini in 1989 which values pleasure from materials, attention to the local, diversity, fairness, and sustainability and which is concerned with creating understanding and appreciation.

collaboration taking place to achieve some *design-oriented* goals to draw attention to how vagueness, hesitation and delay serve the purposes of collaborations in some contexts.

I take quality to be defined as *fitness for purpose,* thus conversational strategies that serve a conversation's purpose have a direct bearing on the topic of collaboration quality. I draw on my own and other researchers' studies of collaboration in which the essential purpose of the social interaction is to make *design decisions* that draw effectively on the skills and knowledge of (all) the collaborators. The successful outcome of such collaboration is not a design that pleases everyone involved, but one where each stakeholder understands the reasons for the decisions that have been made, and is able to justify them from within their own frames of reference.

The term talk-in-interaction covers both informal and formal conversation, the latter being talk subject to functionally specific or context-specific restrictions, or specialized practices or arrangements [Schegloff 1999, p.407]. The features of talk-in-interaction I attend to below come from inspecting how collaboration takes place conversationally and the observations are based on the method of Conversation Analysis (CA) [Sacks 1995, Schegloff 1997]. From this perspective a turn-at-talk is considered as an action, its meaning is approached by considering the local context, in particular by examining the next action, that is the turn-at-talk which follows it. This approach, in focusing on the performative, thus dispenses with reliance on making claims about what is in a speaker's or a hearer's mind. 'In conversation analytic studies, the point is not to build theory but to unpack how events are organized and ordered - to see how social actions are structured and accomplished. This is not done by employing e.g. theoretically-derived concepts or definitions, but rather it is attempted through analysis of the data on the basis that each turn at talk displays *the speaker's understanding* of what is going on.' [Matthews 2009, p.36]

In the remainder of the paper I briefly describe some observations that suggest that, in *design-oriented* collaborations, vagueness, hesitation and delay, scrutinized in the local context of where they occur, play positive roles in support of the collaboration's purpose. The acknowledgement of this potential has implications for how the measurement of collaboration quality is addressed. To make the argument for the collaboration-serving roles of vagueness, hesitation and delay I draw attention to the positive terms related to each in preference to those, equally closely related, which have pejorative overtones.

2 Vagueness

Vagueness, selected thesaurus related terms: sketchy, **open to discussion**, uncertain, ambiguous, uncompleted, contingent, garbled, deficient, perfunctory, feeble, sloppy, careless, incomplete.

The openness to possibilities that is inherent in the nature of sketches, both for the sketcher himself (thinking sketches) and for the audiences of his sketches (communication sketches) [Ferguson 1992] is a phenomenon that has been studied extensively e.g. by Goel [1995]. Thus, it is well understood that ambiguity may be a critical positive quality in some contexts, whilst it is a shortcoming in others. In a related vein in another context, the ways in which lo-fidelity prototypes promote user engagement in interaction design - in contrast to the affordances of hi-fidelity prototypes - is so well understood that it has become an established practice in interaction design processes that engage users. The lo-fi ones communicate suggestions which are fluid, open to revision whereas the hi-fi ones have a specificity that can be interpreted as frozen. (e.g. See Rettig [1994] for a summary of the arguments.)

When we make a close inspection of the turns at talk in design conversation we can see instances of what we might call 'sketchy talk' promoting engagement in collaborative contexts. In a study of conversation between an architect and a building user Glock analyses an episode in which, as he presents a plan for a proposed building, the architect raises the issue of the size of a particular room, a waiting room [Glock 2009]. Glock's micro-analysis examines the architect's choice of phrases to negotiate an increase in the size of the room with the building user. The saying of 'it does look + kind of + small to my eye in relation to the size of the project' allows the architect to introduce a design goal indirectly, encouraging the preferred (agreement) response by a number of devices including delay (+), mitigation ('kind of') and accounting ('in relation to the size of the project') [op.cit., p.293]. Glock goes on to discuss how vagueness infuses the design collaboration with the ambiguity that is essential to certain stages of the design process and makes the point that the vagueness of natural language – in the local context of the example he presents – introduces, and invites the space for negotiation of part of the design detail. He contrasts this with alternative means of raising the matter of the room size by, for example, simply reading off room dimensions from the actual plan over which the discussion is taking place. He suggests that the speaker's way of raising the issue makes a difference to the hearer's understanding of what she is being invited to do.

Inspecting the same dataset as Glock, at a different level of granularity, I have observed weak (vague) scenarios of building use offered by the architect serving to elicit immensely rich use cases from the building users. Here I outline one instance. The architect introduces the topic of the size of the waiting room as indicated above. In response to the reluctance of the building user to comment regarding the size in a quantified way (e.g. the number of seats it can/should be able to hold – as it is a waiting room), the architect sketches out what the room is doing, he says, 'the room is doing so much it's allowing people through to the porch area so it's also allowing access to the loos'. This is actually a rather thin description, a skeletal indication of a way the waiting room will be used.

However what happens next is that the building user responds, not directly with an answer about whether the room is big enough or not but giving an answer on, and in, her own terms by launching into a rich account of what people might be waiting for, the different kinds of 'waiting' the building must accommodate. Effectively she tells the architect what 'waiting' means in the context of that building's use. (It is a crematorium; she talks about the physical, psychological and social needs for separation and waiting that crematorium visitors will have.) Thus, she reveals needs (the functional requirements) for the building and its landscape to accommodate the 'waiting' – needs which cannot be served solely by a designated waiting 'room'. She is prompted to compensate for the deficiencies in what she is offered; and through the conversational opening the vague scenarios provide she is able to contribute valuable information that informs the building design [McDonnell 2009].

3 Hesitation

Hesitation, selected thesaurus related terms: **question, challenge, stop and consider**, skeptical, doubtful, inarticulate, avoid, reluctance, timidity, vacillate, falter, dawdle, irresolute.

Using CA in a manner similar to Glock, and focusing on the same dataset as he does, Oak has proposed that some occasions of hesitation, for example apparently avoiding answering a question, functions as part of the means by which collaborators create their own roles, and the roles of each other in collaboration. On the question of the room size, mentioned already in section 2 above, Oak's interpretation is that 'by offering descriptions (of room uses) rather than straight answers (room dimensions), the client casts the architect into the roles of 'client-interpreter' and 'decision-maker' .. (which) puts the architect into a position from which he is constrained to make decisions about interior spaces without clear direction from her' [op.cit., p.313]. Here, hesitation functions to (en) force responsibility for certain decisions onto a particular party to the collaboration.

However, hesitation, conversationally marked, serves a whole variety of functions – functions we can only intimate through close attention to the local context in which it occurs. Hesitation can serve a similar encouragement–to-contribute function as vagueness. In a recent unpublished study of recordings of two meetings of an architect discussing the elaboration of a design brief with a potential client I have identified a rich variety of conversational mechanisms which render the architect's design proposals open to negotiation for the client. The mechanisms include: explicit enumeration of possible design variations; explicitly open-ended conclusion to a conversational turn; proffering design proposals using a variety of linguistic qualifiers and modals; and use of relational modality cues (through choice of personal pronoun). In this case, these successfully draw the client into the designing activity itself as well as

encouraging her to make her own informed choices. In the second meeting, viewed at the macro-level, the architect presents two possible schemes to the client. However, closer inspection of the interaction shows that, using the mechanisms I have listed, a myriad of alternative design possibilities, at all levels of design detail, are opened up through the ways in which the 'two' schemes are talked about. The architect skillfully weaves a course in which he can be seen as authoritative concerning his professional expertise, *at the same time*, inviting challenge regarding those matters that are the domain of the client. He marks his suggestions as negotiable via indications of tentativeness which include hesitation. The extract from their exchange, shown in Figure 1, gives a glimpse of this.

Second meeting at site of work between client (c) and architect (a). The architect has presented a fluid variety of alternatives at every level of detail through the way he has talked through 'two' proposals. At the point below the client seeks advice about 'hassle, timescales and costs:

c: I have no frame of reference so

a: yeah I mean that one's going to be a lot more expensive

c: yeah

a: cos although the the plumbing is there you're going to be putting in a lot of services whereas here you're doing minimal

c: um

a: and so here I'm just about moving the (.) and I tried not moving the (.) sink

c: well we can run to that

a: we can keep it to where it is

c: um

a: you're you're falling away there um you almost could do it

c: um

a: you could almost do it within that (.) that space

c: um

a: and take it out

c: um

a: and leave this

c: um well the kitchen would actually come out if I'm doing this

a: and you'd just have this

c: um

a: even more um even less work

c: um

a: erm and then take it out and open

c: um

a: and we could virtually put that on and play a few games with the rules

c: um

a: and treat it as a conservatory

c: which means we do it

a: which makes it a few easier things for building regs

c: yeah ok

a: and controls what have you erm even more minimal

c: it's just about being sensible isn't it (.) cos I like I mean the I love the (.) I like the big open space and I think

a: yeah

c: you know I think I think something like this is the right thing to do the question is *a* can I afford it and *b* can I really stand to go through three months of hell (.)

Figure 1

4 Delay

Delay, selected thesaurus related terms: **deliberate, take time, defer,** postpone, prolong, procrastinate, suspend.

Studies of design have shown that, even where there is no collaboration, a design is not developed monotonically. Breadth first, depth next characterizes expert design, and this, and the need to be able to backtrack, implies that parallel lines of enquiry are sustained simultaneously. Deferral, then, is part of what we

see in the movement between parallel lines of enquiry, as is the delaying of decisions as a deliberate strategy to cope with uncertainty or an information deficit. Deferral is a healthy feature of a natural design process.

In a recent study of collaboration between two professional software designers I observed delay in the resolution of some critical differences of perspective between the collaborators (about the fundamental organizing principles regarding the system architecture of the software they were designing) which appeared to be motivated by an overriding need to keep designing productively. Again, working within the CA approach, it appeared that the collaborators were aware that they did not share a common framing of the design. Nevertheless, they were able to work (on), deferring resolution by deliberately setting aside the potential obstacle using two strategies to underpin the delaying. First, they signaled contributions (that rested on the delayed issue) as conjectural, including by enumerating the (two) alternative framings in their talk. Second, they 'bracketed' the (two) associated belief sets by wrapping them in encapsulating terms. They were then able to progress with the design, referring to the delayed (unresolved) issue obliquely, via the encapsulating terms, without having to 'stop' to confront it. Of-course whether this coping strategy turns out to be folly or masterly collaboration skills in action can only be judged post hoc when the design task is completed and the design can be seen alongside those decisions that have influenced it. Delay may be inappropriate procrastination, but, equally, it may be a valid, pragmatic response.

5 Conclusions

Looking at the thesaurus terms I have listed related to the three phenomena I have chosen to highlight we can see that they range from positive to negative. In the observations I have chosen to mention, the positive is emphasised by selectively referring to the constructive roles these phenomena can play in design-oriented collaboration.

Clearly, depending on the collaboration's purpose and the local conversational context within the collaboration itself, each of the phenomena I have selected may contribute negatively, producing effects which neither serve the collaboration's goals nor support the smooth flow of the collaboration itself. The purpose *each* occurrence serves can only be established by examining the local context, the surrounding turns-at-talk. Baker's paper in this collection [Baker 2010] makes a closely related argument as he unpacks the contrasting roles different forms of dialogical thinking (expressed through talk) may serve. They may contribute to the collaboration constructively *or* destructively, just as laughter may relieve tension or enhance conflict according to when it occurs. The observations about vagueness, hesitation and delay offered here are a reminder that to measure collaboration quality firstly we must pay attention to what the collaboration is

intended to produce; here I have focused on *design-oriented* collaboration goals to point out that in designing delay is integral to a sound process. Secondly, we must be sensitive to the individual contexts of what we are counting in our measurement and question what lies beneath surface features. Compare the two drawings in Figure 2 which were referred to during the crematorium design collaboration referred to above. Without any contextual information (a) looks like a sketch which might suggest a certain fluidity of ideas, whereas (b) the plan, looks more concrete. However, close examination of the design interaction where these two representations appeared revealed that (a) represented, what is an invisible entity (Brooks 2010, p.8), namely the design concept, something that was not at all, in the view of the architect, a negotiable item (Luck 2009); (b) on the other hand shows a detailed plan for the building, many aspects of which were, like the waiting room I have mentioned, up for revision through discussion.

In assessing the quality of any collaboration, the micro-features on which aggregate measures are based, e.g. duration or any of a range of metrics characterizing collaborators' contributions, need to be scrutinised so that we take into account what some of the fundamental conversational mechanisms are contributing to make social engagement possible at all.
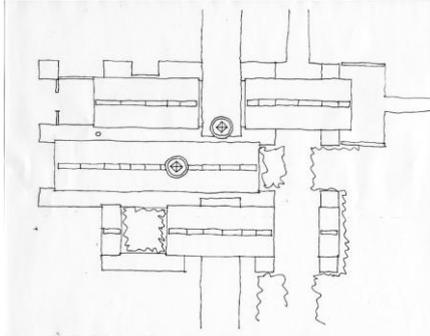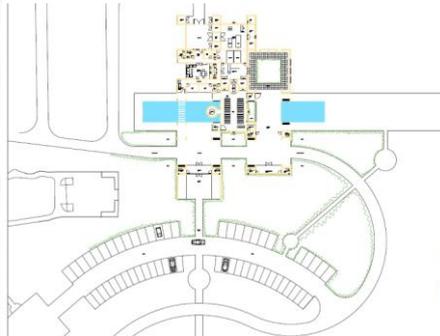

Figure 2a   Figure 2b

6 Acknowledgments

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