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The Video Analyst's Manifesto (or The Implications of Garfinkel's Policies for Studying Instructional Practice in Design-Based Research)

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Studies of Practice and Design-Based Research

Over the past ten years there has been a turn away from conventional approaches to designing innovative curricula toward what has been described as "design experiments" (Brown, 1992; Cobb, Confrey, diSessa, Lehrer, & Schauble, 2003) or "design-based research" (Barab & Squire, 2004; Fishman, Marx, Blumenfeld, Krajcik, & Soloway 2004; Design-Based Research Collective, 2003). Cobb et al. (2003) described this shift in these terms:

Prototypically, design experiments entail both "engineering" particular forms of learning and systematically studying those forms of learning within the context defined by the means of supporting them. This designed context is subject to test and revision, and the successive iterations that result play a role similar to that of systematic variation in experiment. (p. 9).

Design-based research has been characterized as exhibiting the following five features:

First, the central goals of designing learning environments and developing theories or "prototheories" of learning are intertwined. Second, developments and research take place through continuous cycles of design, enactment, analysis, and redesign.... Third, research on designs must lead to sharable theories that help communicate relevant implications to practitioners and other educational designers.... Fourth, research must account for how designs function in authentic settings. It must not only document success or failure but also focus on interactions that refine our understanding of the learning issues involved. Fifth, the development of such accounts relies on methods that can document and connect processes of enactment to outcomes of interest. (Design-Based Research Collective, 2003, p. 5).

However, how do we go about studying forms of learning within a "designed context"? How do we account for "how designs function in authentic settings?" What are the methods by which we might "document and connect processes of enactment to outcomes of interest"? And, finally, but most crucially, where do we turn for a vocabulary that will allow us to express our "prototheories of learning" in terms that are useful both to "practitioners and other educational designers"? All of these questions point to the need for conducting fine-grained studies of instructional practice and this is the role that

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video-analytic research is presumably designed to fill. But this still leaves unanswered the biggest question of all: How do we go about systematically and rigorously studying practice?

For an answer, we must turn to the disciplines in the social sciences, namely sociology, anthropology, communication studies, that explicitly take up practice as a legitimate object of study. One particularly promising line of inquiry originating within sociology is the tradition known as Ethnomethodology (EM). EM is centrally concerned with practical reasoning and the procedures (i.e., "methods") participants (i.e., "members") routinely employ in making sense of their own actions and the actions of others, that is in producing what could be called "local rationality" (Heap, 1995). EM's concern with sense-making makes it a natural framework for undertaking a study of instructional practice. Instruction and instructability have in fact been featured topics in ethnomethodology's various programs of study, has focused on how participants produce sense and order within talk-in-interaction. It has generated a large and well-articulated body of literature (Sacks, 1992; Heritage, 1984, 1995). Research in CA employs specialized transcription conventions and a logic of "analytic induction" (Heritage, 1995) that could be productively applied to the study of instructional practice.²

There are many ways of approaching the task of analyzing video materials. Because of its central concern with practical reasoning and meaning-making practices, EM would seem to present a useful disciplinary foundation for building a systematic and rigorous program of video analytic research related to design experiments. This paper, therefore, will explore what it might mean to do ethnomethodologically-informed video analytic research. To do so we turn to some of the early writings of the founder of the field, Harold Garfinkel. We have labeled this chapter a manifesto, partly to be provocative, but also because that precisely describes what the chapter strives to achieve (i.e., "a public declaration of policy and aims," *Oxford Modern English Dictionary* [2nd Ed.], p. 606).

Garfinkel's Policies

Garfinkel (1967) defined ethnomethodological research in terms of five policy statements. For expository purposes, we have attached a name (e.g., Indifference, Relevance, Indexicality) to each policy statement,

¹ The second half of Garfinkel's (2002) recent book on EM is devoted to an extended discussion of "Instructed Action."

 $^{^{2}}$ We do not provide a description of the specifics of this methodology here but instead refer the interested to reader to any of the several available introductory guides (e.g., Psathas, 1995; Have, 1999; Hutchby & Woolfit, 1998).

summarizing what we took to be a defining feature of the policy. Garfinkel's policies are densely worded and, though presented as five independent items, are complexly interconnected and overlap considerably in their scope. Indeed, some of his policies (e.g., Indexicality, Contingently-Achieved Accomplishment) have a fractal character in that they can be read to encapsulate or summarize some or all of the other policies. The policies are less practical specifications for doing video analytic work than prescriptive or normative guides for how to document a practice in a valid way. For each policy statement, we have endeavored to explain the implications of the policy for video analytic research.

Policy 1: Indifference

An indefinitely large domain of appropriate settings can be located if one uses a search policy that *any occasion whatsoever* be examined for the feature that "choice" among alternatives of sense, of facticity, of objectivity, of cause, of explanation, of communality *of practical actions* is a project of members' actions. Such a policy provides that inquiries of every imaginable kind, from divination to theoretical physics, claim our interest as socially organized artful practices. (Garfinkel, 1967, p. 32)

This aspect of EM research is sometimes described as *ethnomethodological indifference*. This is not meant to suggest a lack of care or interest on the part of EM researchers, but rather to observe that any instance of social action is as good as any other for the purposes of understanding how social action is organized. EM is concerned with the practices people engage in to make sense of their own and other's activities. Since human interaction always constructs meaningful order, the EM researcher can analyze almost any interaction and discover interesting processes of meaning construction and order negotiation. An EM researcher has great latitude, therefore, in selecting settings in which to do analysis. In particular, any circumstance, situation or activity that participants treat as one in which instruction-and-learning is occurring can be investigated for how instruction and learning are being produced by and among participants.

Ethnomethodology's policy of indifference stands in stark contrast to the assumptions underlying conventional experimental research in education. Experimental designs based on statistical models depend upon acquiring a sufficiently large sample of instances before any valid inferences can be drawn. The policy of indifference not only suggests that any instance will do for the purpose of demonstrating some phenomenon of interest, but also that such a demonstration can be based on a single case.

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Policy 2: Contingently-Achieved Accomplishment

Members to an organized arrangement are continually engaged in having to decide, recognize, persuade, or make evident the rational ... character of such activities of their inquiries as counting, graphing, interrogation, sampling, recording, reporting, planning, decision-making, and the rest. ... "[A]dequate demonstration," "adequate reporting," "sufficient evidence," "plain talk," "making too much of the record," "necessary inference," "frame of restricted alternative," in short, every topic of "logic" and "methodology," including these two titles as well, are glosses for organizational phenomena. These phenomena are contingent achievements of organizations of common practices, and as contingent achievements they are variously available to members as norms, tasks, troubles. (Garfinkel, 1967, p. 32-33).

Garfinkel ellaborated that by *rational character* he meant, "coherent, or consistant, or chosen, or planful, or methodical, or knowledgeable" (p. 32). The imputed sense or meaning of an action or of a sequence of actions is not determinate, however, but is instead endlessly open to new interpretation. Actions produce their own sense since they are designed in their achievement to be recognizable as what they are. The 'interpretation' or 'recovery' of that sense rests on co-actors' abilities to induce or infer their sense from actions themselves as they are performed/achieved locally in the circumstances of their production.

Garfinkel described this notion of inferring sense from actions as the "documentary method of interpretation" (p. 78). Garfinkel credits the expression to Mannheim, though his usage goes quite beyond that developed by Mannheim (1968, 53–63). In using this expression Mannheim was addressing the problem of how to interpret the "motivated character" (Garfinkel, 1967, p. 95) of observed action. As Garfinkel described,

The method consists of treating an actual appearance as "the document of," as "pointing to," as "standing on behalf of" a pre-supposed underlying pattern. Not only is the underlying pattern derived from its individual documentary evidences, but the individual documentary evidences, in their turn, are interpreted on the basis of "what is known" about the underlying pattern. Each is used to elaborate the other. (p. 78)

For Garfinkel, the documentary method is "a convenient gloss for the work of local, retrospectiveprespective, proactively evolving ordered phenomenal details of seriality, sequence, repetition, comparison, generality, and other structures" (Garfinkel, 2002, p. 113). It is a ubiquitous and unavoidable feature of all social interaction. Actions must provide for their own recognizability as instances of some broader category of behavior.

Another implication of the documentary method of interpretation is that actors are selective in what they treat as relevant. As Heritage (1984) explained, "The task of fellow-actors ... is necessarily one of *inferring* from a fragment of the other's conduct and its context what the other's project is, or is likely to be" (p. 60). In other words, actors are faced with what others are doing and must select which fragments of the other's conduct and its context to consider in inferring the sense of the actions under consideration. The only requirement that actors themselves place on their sense-making is that it be adequate for the purposes at hand. Meaning, therefore, is "a contingent accomplishment of socially organized practices" (Garfinkel, 1967, p. 33).

Instruction is, to use Durkheim's term, a "social fact." It is an organized arrangement constructed in all its details to be recognizable as what it is. Its recognizability is a contingently-achieved accomplishment of the members to the activity, that is the teacher and her/his students. This aspect of instruction is sometimes overlooked in educational research that treats a curricular innovation as something that has an existence outside of what actually takes place in classrooms. Instead it is something that is produced through the moment-to-moment interactions of the members in the setting. This is not to deny that teachers do have teaching plans or to suggest that there cannot be abstract models of effective instruction. When we speak of the "designed context" (Cobb et al., 2003, p. 9) of instruction, however, we must be ever mindful of its status as a contingent achievement (see discussion under Policy 5 of how action is "doubly contextual"). The task before the analyst remains one of adequately accounting how participants actually *do* the teaching plan or *do* the instructional model as ongoing interactional achievements.

This policy highlights the need for a *sequential analysis* of interaction (c.f., Sacks, 1992, LC2:339 et passim), that is an analysis of how instruction is produced within an unfolding stream of interaction. Such an analysis would constitute a description of the unfolding determinate sense of the situation that members construct through their actions. Video technology is a valuable tool for performing a sequential analysis of a contingently-achieved activity. It enables the analyst to inspect the interaction at a much higher level of detail than could ever be achieved through direct participant observation. Video also provides for repeated inspectability of the recorded materials. As Schegloff (quoted in an interview

published in Prevignano & Thibault, 2003) argued, "These days, only such work as is grounded in tape (video tape where the parties are visually accessible to one another) or other repeatably (and intersubjectively) examinable media can be subjected to serious comparative and competitive analysis" (p. 27f). The use of video-based materials also provides a means for satisfying McDermott, Gospodinoff, and Aron's (1978) criterion for "ethnographically adequate description," namely that such a description "be presented in a way that readers can decide for themselves whether or not to believe the ethnographer's account of what it is that a particular group of people is doing at any given time" (p. 245).

Policy 3: Relevance

A leading policy is to refuse serious consideration to the prevailing proposal that efficiency, efficacy, effectiveness, intelligibility, consistency, planfulness, typicality, uniformity, reproducibility of activities—i.e., that rational properties of practical activities—be assessed, recognized, categorized, described by using a rule or a standard obtained outside actual settings within which such properties are recognized, used, produced, and talked about by settings' members. (Garfinkel, 1967, p. 33)

Garfinkel, in developing Policy 2 wrote, "It is not satisfactory to describe how actual investigative procedures, as constituent features of members' ordinary and organized affairs, are accomplished by members as recognizably rational actions *in actual occasions* of organization circumstances by saying that members invoke some rule by which to define the coherent or consistent or playful, i.e., rational, character of their actual activities" (author's italics, p. 32-33). He went on, "Nor is it satisfactory to propose that the rational properties of members' inquiries are produced by members' compliance to rules of inquiry" (p. 33). He was railing against the practice in formal sociological analysis of treating the analytic subject as a "judgmental dope" (p. 70) acting in ways determined by the subject's status as a student, teacher, a gendered person, learning-disabled, low-achieving, language impaired, etc. For Garfinkel, it is not acceptable to offer descriptions that depend upon analyst-imposed categories as accounts for what participants do or don't do.

Wittgenstein (1953) had already demonstrated the incoherence of treating social practices as a matter of following culturally defined rules. Tacit practices and group negotiations are necessary at some level to put rules into practice, if only because the idea of rules for implementing rules involves an impossible recourse. Although there is certainly order in social interactions that people are not explicitly aware of but

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that can be uncovered through microanalysis, this order is an interactive accomplishment of the people participating in the interactions. While the order has aspects of rationality and meaning, it is not the result of simply invoking or complying with a determinate rule. Consider, for instance, the orderliness of traffic flows at stop signs. The smooth functioning in accordance with traffic laws is continuously negotiated with glances, false starts and various signals. Although we do not usually explicitly focus on how this is accomplished unless we take on an analyst's perspective (because explicit awareness is not usually necessary for achieving the practical ends), the signs that are exchanged are necessarily visible to the participants and accordingly accessible to a researcher with appropriate means of data capture.

Methodologically, Policy 3 calls for "bracketing out" our pre-existing theories and interpretations while constructing our analyses. The introduction of categories to account for behaviors should only take place when we can empirically demonstrate their "relevance" as evidenced by the talk and activities of the participants. Schegloff (Prevignano & Thibault, 2003) specified, "The most important consideration, theoretically speaking, is (and ought to be) that whatever seems to animate, to preoccupy, to shape the interaction *for the participants in the interaction* mandates how we do our work, and what work we have to do" (p. 25). Schegloff (1991) described the ethnomethodological notion of relevance when he wrote:

There is still the problem of showing from the details of the talk or other conduct in the materials that we are analyzing that those aspects of the scene are what the parties are oriented to. For that is to show how the parties are embodying for one another the relevancies of the interaction and are thereby producing the social structure. (Schegloff, 1991, p. 51)

The important point for conducting an ethnomethodologically-informed analysis (video-based or otherwise) is that it is up to the members themselves to work out through their interaction what is to be treated as relevant and it is the task of the analyst to *discover* what these relevancies might be. This has clear implications for the study of instructional practices in the context of design experiments. Whether or not a situation is an instance of learning-and-instruction or of successful innovation is not a matter for curricular designers or program evaluators to judge *a priori*, but for video analysts to demonstrate in their empirical analysis of what the participants took their own activities to be. Meaning, therefore, is not a matter for retrospective rationalizations are not the same as the sense making that is produced *in situ*. It is up to the video analysis to locate and document what counts as learning and instruction within "actual occasions of

organizational circumstances." Garfinkel's policy of relevance also calls into question the commonly used practice in discourse studies of coding talk using externally-defined coding categories.

Policy 4: Accountability

The policy is recommended that any social setting be viewed as self-organizing with respect to the intelligible character of its own appearances as either representations of or as evidences-of-a-social-order. Any setting organizes its activities to make its properties as an organized environment of practical activities detectable, countable, recordable, reportable, tell-a-story-aboutable, analyzable—in short, *accountable*. (Garfinkel, 1967, p. 33)

Actors organize their activities in ways that provide for their intelligibility as reportable and inspectable. To be more specific, we assume that people do things in ways that are inherently designed to make sense. This is a powerful assumption because it allows us to say that actions and the sense associated with them are sequential in nature and that this sequential organization produces, sustains and is informed by members' shared sense of the local social order. This allows members to recognize prospectively and retrospectively that they are engaged in the work of instruction-and-learning as they engage in that work. Garfinkel's policy of accountability highlights that actors are capable of making choices and they have a shared, if provisional and defeasible, sense of propriety with respect to what they both can and cannot do and what they should and should not do. While this sense of propriety may or may not be something actors can account for, it is evident in what they do and the way they do it. When Garfinkel refers to behavior as being *accountable*, the word can be understood in two senses. First, members can be (and are) responsible for their actions and are accountable to their interlocutors for utterances and actions which may appear to be without reason or rationale. Second, and more obliquely, Garfinkel is contending that all behavior is designed in ways to give an account of the action as an instance of something or the other (see the description of the documentary method of interpretation under Policy 1). It is the work of the video analyst to document how this is accomplished.

EM begins from the assumption that members are doing something competently and that our job is to figure out what it might be. When we say that members are competent, we mean that they are qualified to recognize (and assess) the competence of their own actions and those of others. It is this very competence that provides for their status as membered participants and that provides the basis for accountability. This

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competency is referred to by ethnomethodologists as the "unique adequacy requirement."³ Garfinkel (2002) stipulated that the ability to recognize competence is "staff-specific, work-site-specific, discipline-specific" (p. 113). The unique adequacy suggests that it is the analyst's job to document what the participants *are* doing, rather than what they *should be* doing based on some set of *a priori* expectations. In this way it prohibits assessment by analysts of members' achievements.

Policy 5: Indexicality

The demonstrably rational properties of indexical expressions and indexical actions is an ongoing achievement of the organized activities of everyday life. (Garfinkel, 1967, p. 34).

Indexical expressions are those whose sense depends crucially upon knowledge of the context within which the expressions were produced (as opposed to "objective" or context-free expressions). The most obvious examples are expressions that contain deictic terms such as *here, there, I, you, we, now, then*, etc. To make sense of an utterance containing such terms, it will generally be necessary to know who is the speaker, who is the audience, where the speaker and audience are located, when the utterance was produced, etc. Any sentence containing such elements will have different interpretations or meanings depending on the circumstances in which it is produced. Because of this, deictics are sometimes referred to as "shifters" by linguists. Logicians and linguists "have encountered indexical expressions as troublesome sources of resistance to the formal analysis of language and of reasoning practices" (Heritage, 1984, p. 142).

One of Garfinkel's contributions was to note that deictic terms are not the only ones that have indexical properties. Heritage (1984) provides the example of the assessment, "That's a nice one," offered while the speaker and the listener are attending to a particular photograph. What qualifies the picture as nice (e.g., its composition, color rendering, content, etc.) is not made evident by the utterance and must somehow be worked out by the listener by inspecting the object in question. In this way, non-deictic terms such as *nice* are also indexical in use. Not only expressions, but also socially-organized actions can have indexical properties. Imagine two people standing face-to-face and one participant reaching out and touching the other. The meaning of this act, however, as a warning, provocation,

³ See Garfinkel, 2002, pp. 175-176 for an elaborated discussion of this requirement in its weak and strong forms.

greeting, demonstration, empathetic gesture, act of belligerence, etc. depends crucially on context, on the nature of the interaction that immediately preceded and immediately follows the action.

The fact that the meaning of indexical expressions and actions cannot be determined isolated from the circumstances within which they were produced does not usually present a problem for participants. For starters, participants inhabit the situations within which the expressions and actions are produced and, as a result, are naturally supplied with many resources for resolving their meaning for present purposes. Further, participants have the opportunity to dispel any residual ambiguity through additional sense negotiation. Ultimately, however, all indexical expressions and actions are always contingent and to some degree indeterminate to a degree that is deemed acceptable to actors themselves. For Garfinkel, the question of how this indeterminacy is managed in the nonce on a routine basis was at the heart of all ethnomethodological inquiry.

Members' talk and action has a reflexive character, which is to say that it is simultaneously "context-shaped" and "context-shaping" (Heritage, 1984). The meaning of any action depends crucially upon the context within which it is performed. At the same time, the action itself re-shapes the context in ways that will inform the understandability of other actions that follow. Heritage (1984) referred to this as being "doubly contextual" (p. 242). To study instruction-and-learning as a form of practice, therefore, we need to examine how particular actions provide for their own understandability *as* instruction-and-learning. Said another way, we need to study observed actions as resources by which actors can produce the sense of prior actions in light of the current action, and make relevant and sensible possible subsequent actions. This clashes with the view of context as a given, as a container within which actors do what they do. Instead, it poses the task for the video analyst of rendering an account of how members in their capacity as "order production staff" (Garfinkel, 2002, p. 102) go about constructing context through their indexical actions.

And so sayeth the book of Harold.

EM and Design-Based Research

Garfinkel's policies stipulate that there is more to studying instructional practice than simply mining examples of 'good instruction' or 'bad instruction' from compiled recordings. It is the responsibility of the analyst to discover within the recorded materials what the members are actually accomplishing (Policies 2 and 4) and are making relevant (Policy 3) through their interaction. The

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requirement to "bracket out" pre-existent interpretations (Policy 3) might suggest the need for a division of labor within design-based research teams. In particular, it makes explicit that the tasks of design and analysis must be treated as distinct, at least logically, if not in terms of specific team member responsibilities. This does not imply that they are independent, however. Instead their relationship is a symbiotic one—design must be informed by analysis, but analysis also depends on design in its orientation to the analytic object.

We are not the first to propose applied ethnomethodological research (c.f., Heap, 1990); nor are we the first to undertake ethnomethodologically-informed studies within classrooms and other sites of instruction (c.f., Mehan, 1979; Ford, 1999; Macbeth, 2000; Koshik, 2002). What is novel, however, is the proposal to use ethnomethodologically-informed findings as one component of a larger program to improve education, specifically through design-based research. At the moment, however, the initiative outlined in this chapter has only the status of a proposal in that we know of no research team that has actually attempted to employ video analysis in precisely the way that we have described here.

As a discipline focusing on members' methods for practical reasoning, EM provides a useful foundation for research into the practices of learning. Garfinkel's policies for ethnomethodological studies, therefore, provide a reasonable starting point for building a rigorous program of video-based analysis connected to design-based research. Much remains, however, to bring such a program to life. This chapter was not intended to substitute for a careful reading of Garfinkel's own development of the five policies summarized here. We recommend that interested readers study not only the full text of the policies themselves (Garfinkel, 1967, pp. 31-34), but also Garfinkel's three advisories (Garfinkel, 2002, pp. 112-114), and his description of the prominent objects of study in ethnomethodological inquiry (Garfinkel, 1967, pp. 4-10).

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