

Vulgar competence, ethnomethodological indifference and curricular design

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Abstract. In the paper, we discuss the relation between ethnomethodologically inspired video analysis and curricular design. Often the relation between analysis and design is taken as a relation between descriptive and prescriptive accounts. Conceptualised in this way, ethnomethodology and curricular design is a world apart. With a focus on ethnomethodology's take on analytical and normative questions, however, some ethnomethodological insights might play an interesting role in investigation as well as development of computer based learning environments. The discussion is structured around four analytical commitments: become vulgarly competent; be indifferent to formal analytic methods, not member concerns; focus on actions and immanent pedagogies, not learning; and, do hybrid studies.

Keywords: Ethnomethodology, video analysis, conversation analysis, design experiments, methodology

INTRODUCTION

The last years growing interest in *designed based research*¹, has partly developed as a response to the limitations of using standardized tests in order to investigate educational interventions (e.g., The design-based research collective, 2003). As Berger *et al.* (1994) puts it “even the best pre-post and randomized designs” (p. 476) cannot provide an “understanding of what is going on while students are learning using instructional technology” (ibid.). Recognizing this problem with most studies of computers in education, Roth *et al.* (1996) argue for a methodological change: from treating the technological interventions as independent variables or factors to approaches where students' interaction with technology is investigated. Such an approach also concurs with the growing recognition that general statements about technological or curricular interventions seldom are functional if one wants to understand and further improve educational activities. As Erickson (1986) points out:

Answering the question, “What is happening?” with a general answer often is not very useful. “The teacher (or students) in this classroom is (are) on-task” often doesn't tell us the specific details that are needed in order to understand what is being done [...] Nor is an answer like the following sufficient usually: “The teacher is using behavior modification techniques effectively.” (p. 121)

Erickson continues by arguing that questions concerning how the teacher use the techniques and what these techniques consist of are potentially more rewarding than general questions. This makes him draw the somewhat paradoxical conclusion that “to achieve valid discovery of universals one must stay very close to concrete cases” (p. 130). In line with this, our research group have increasingly been concerned with the relation between theory and practice; or, to be more precise, between video-analysis and curricular design. Two questions have recurred, in different guises, in discussions with colleagues, teachers and students: in what way can one perform investigations that are *useable* in the development of learning environments and how can the development and assessment of educational settings *inform* our research? Although the relation between descriptive studies and design has to be dealt with in relation to each particular project, we hold that issues concerning analytical commitments, normativity and relevance have consequences for both research and curricular design. Furthermore, we believe that ethnomethodology (EM), by its focus on the practical details of interaction and interest in the reflexive relationship between competencies and settings, has a take on these issues relevant to the CSCL community.

EM, CA and hybrid studies

Beginning in the 1950's, EM has its roots in the work of Harold Garfinkel and has subsequently developed and diverged into rather different strands of research (Maynard & Clayman, 1991). In an often-recounted story, Garfinkel coined the term ethnomethodology when he, together with other researchers, was to investigate the work and reasoning of juries (cf. Garfinkel *et al.*, 1981; Heritage, 1984; Hill & Crittenden, 1968). To borrow a

phrase from Hutchins (1995), the researchers tried to investigate reasoning “in the wild” by analyzing tape recordings of jury deliberations from an actual case. Instead of using predefined categories, such as Bales Interaction Process Analysis (Bales, 1950)², Garfinkel was interested in capturing the particular (ethno)methods through which the jury was constituted and made recognizable *as* a jury. A fundamental premise in this research – and arguably the most fundamental assumption in all EM research since then – is that social action are produced and recognized in orderly and intelligible ways since members of a setting have recognizably shared methods for producing action. How members’ methods create order are therefore to be found in witnessable interactional details; and, consequently, the production of order can be discovered if a researcher conducts close investigations of practical activities³.

In the sixties until the mid seventies, Garfinkel was collaborating with Harvey Sacks, the initiator of conversation analysis (CA). By transcribing and thoroughly examining tapes of ordinary conversations, Sacks and colleagues – such as Gail Jefferson and Emmanuel Schegloff – developed an approach to the study of naturally occurring conversation, focusing on the sequential organisation of talk-in-interaction. Ground breaking studies was provided regarding structures such as *turn-taking* (Sacks *et al.*, 1974), *adjacency pairs* (Schegloff, 1972; Schegloff & Sacks, 1973) and *repairs* (Schegloff *et al.*, 1977). Nowadays, many researchers consider CA an established academic discipline and the research program has accumulated a large body of studies (for overviews, see: Goodwin & Heritage, 1990; Hutchby & Wooffitt, 1998; Psathas, 1995; Silverman, 1998; ten Have, 1999). Studies conducted in the tradition of Jefferson and Schegloff are often concerned with interaction sequences regardless of the particular setting examined, “whether it be the home, the laboratory, the office or the street” (Psathas, 1999, p. 141). This could be seen as a consequence of the attempt to find as high a level of generalisation as possible concerning the role and significance of particular practices of interaction.

Although CA might be the most successful offspring of EM, a growing number of studies have focused on the particularities of interaction in organizational environments such as the laboratory or the office (e.g., Goodwin, 1995; Heath & Luff, 1996; Luff & Heath, 1993; Suchman, 2000; Whalen, 1995). There are also EM studies that have investigated the particularities of a range of educational settings. In the introduction to a edited book, Hester and Francis (2000) classify studies of “local educational order” in six categories, for instance, studies of educational decision-making or studies occupied with classroom control and the identification and management of deviance. For our purposes, the studies mentioned in connection to Hester and Francis’ fifth theme, studies concerned with the organisation and accomplishment of academic knowledge, are of particular interest since they carefully examine how competencies are made visible as the relevant business of the setting, a topic potentially rewarding to the analysis of computer supported learning environments.

Among the researchers “in this relatively neglected area” (Hester & Francis, 2000, p. 10), one can find Garfinkel and a few of his second generation of students and collaborators such as Lynch (Lynch & Macbeth, 1998) and Livingston (1986, 1987). These researchers, as well as some researchers within the field of CSCW (e.g., Button & Dourish, 1996; Crabtree, 2001), have begun to use the notion of *hybrid studies* to characterise their work. In an introduction to a recent book by Garfinkel (2002), Rawls claims that hybrid studies can be seen as a kind of “practical or applied research [...] done by outsiders who are also insiders” (p. 40), with the aim “that practitioners in the specialty area being studied will be as interested in the studies as professional sociologists” (*ibid.*). Thus, although EM traditionally have been categorised as social science proper, hybrid studies are applied social science since such studies directly address practitioners. In the same book, Garfinkel maintain that hybrid studies “are written to be read alternately and interchangeably as descriptions and instructions” (2002, p. 102). This could be seen as contrasting with a claim made by Koschmann *et al.* (2004), in a paper that discuss ethnomethodologically informed video analysis⁴, who maintain that EM “are purely descriptive and cannot be used to form prescriptive judgments” (p. 4). As we see it, however, the seemingly conflicting statements do not necessarily have to be opposed. From Garfinkel we take that hybrid studies should be instructive and usable to practitioners in the specialty area. Koschmann *et al.*’s statement could be seen as pointing to the problem of transforming EM studies into simplified guidelines – or into the characteristic “implications for education” section in the end of otherwise descriptive articles⁵ – and treat these transformations as EM. As we see it, the often-used distinction between description and prescription might actually hide the particular ways EM could be used in educational research.

Before we proceed with the discussion we want to point out that the goal is not to provide a reading of what the ethnomethodological program *really* means. Instead, we focus on insights that could be furnished to the particular demands of research aimed toward the development of education practice. Although we thereby discuss what Wilson (2003) call “soft ethnomethodology”, we still think it can be rewarding to explore some of the more radical tendencies inherent in EM. The discussion of these matters take the form of four analytical commitments: *become vulgarly competent; be indifferent to formal analytic (FA) methods, not members concerns; focus on instructed action and immanent pedagogies, not learning; do hybrid studies*. The commitments are to be taken mainly as summaries of (or glosses on) one way EM could be used in educational research. There is an internal order among them, where each commitment builds on the previous and where they – in an indirect way – point towards different phases or activities within the research process.

BECOME VULGARLY COMPETENT

The first analytic commitment is to become vulgarly (ordinarily) competent in relation to the phenomenon or practice under scrutiny. For instance, Garfinkel insisted that his students, who set out to investigate specialized professional domains such as science, truck driving and mathematics, had the appropriate training in the practices of their fields of study. At first glance, this commitment could be seen as trivial. Of course the analyst has to have an understanding of the investigated phenomena. As Rawls (Garfinkel, 2002) points out, however, many researchers put more emphasis on formulating research questions, clarifying concepts and operationalizing terms than getting an initial understanding of the setting. Additionally it is often seen as unscientific “to change the research question, or research protocol, in the midst of research” (p. 27), with the consequence of “treating a researcher’s increasing understanding of a research site as ‘subjective,’ while research conducted in relative ignorance is considered ‘scientific’” (ibid.)⁶.

The research projects we are involved in deal with settings that are highly specialized. For instance, in one project we are investigating the use of simulations by nurses who are training to be specialists; in another project we are looking at how engineering students perform lab work. In all projects, we investigate practices where members are supposed to see certain things in professionally accountable ways: the nurses are supposed to see a high pulse rate as an indication of pain and act accordingly, and the engineering students have to be able to see a cluster of points on a computer screen as a relation between force and acceleration. In order to recognize what an event is, that is, what it is *heard* and *seen as*, by members to the setting studied, we as researchers have to be vulgarly competent in the work of the setting. Put differently, as any formulation made by a member means more than can be said in so many words (Garfinkel & Sacks, 1970), how a formulation is presumably heard is for its recognition tied to being a competent member of the setting studied. For competent members, formulations and activities make sense, but for a newcomer to a specialized setting it is impossible to fully grasp what is going on. As Lynch (1993) points out:

As should be obvious to anyone who has attempted to read specialized scientific journals, a mastery of disciplinary techniques is required for making adequate sense of the prose, graphics and mathematical expressions. To comprehend the unique ‘what’ at the core of each coherent discipline requires a reciprocally unique method for coming to terms with it. Such method is inseparable from the immanent pedagogies by which members master their practices. (p. 273)

If video-analysts want to understand the practical competencies of anaesthesiologists or scientists in *interactional detail* it is not enough to have a general idea of what anaesthesiology, physiology or science is about; it is not enough with a “layman’s gloss” (which we could gain simply by asking a member or reading a popular textbook on the subject). When Lynch writes about the reciprocally unique methods for coming to terms with the specific “what” at the core⁷ of each discipline, he touches on a critical and distinctive aspect of EM: methods – any methods, be they methods of scientific practice or of ordinary rationality – are in each case locally occasioned and bound to a specific competence system (Lynch, 1993). This idea has sometimes been formulated as the unique adequacy requirement of method which:

is identical with the requirement that for the analyst to recognize, or identify, or follow the development of, or describe phenomena of order* in local production of coherent detail the analyst must be *vulgarly* competent in the local production and reflexively natural accountability of the phenomenon of order* he [or she] is “studying” (Garfinkel & Wieder, 1992, p. 182)⁸

The unique adequacy requirement could be seen as an alternative to approaches that focus on generic theories, abstract models or underlying structures. The focus is on the particular, the specific and the ordinary. This requirement also has the consequence of making each area of investigation unique, and the whole corpus of ethnomethodological studies highly diverse, since the “the commitment to ‘real worldliness’ of phenomena means that how studies are done and presented is (should be) shaped by the distinctive character of the phenomena under investigation.” (Hester & Francis, 2000, p. 4). The commitment to the “real worldliness of phenomena” is intrinsically bound to another commitment, the indifference to formal analytic methods, which will be dealt with in the next section.

BE INDIFFERENT TO FORMAL ANALYTIC METHODS, NOT TO MEMBERS CONCERNS

According to the policy ethnomethodological indifference, no set of standardized rules from the social, behavioural or natural sciences can be seen as operating *behind* those methods that members recognizably use. What is specific for EM is the way formal analytic methods of science used in *classical studies*⁹ – such as modelling and coding – are given no privilege in relation to the methods under investigations. This stands in sharp contrast to much educational research where models and theories of learning often are seen as necessary

components in doing investigations. The exercise of ethnomethodological indifference could therefore be seen as a way of abstaining from applying “a gratuitous ‘scientific’ instrument: a social science model, method, or scheme of rationality for observing, analyzing, and evaluating what members already can see and describe as a matter of course” (Lynch, 1999, p. 221). This does not mean that there is no difference between practitioners and the ethnomethodologist or that the analyst is indistinguishable from other competent participants in a particular activity. In contrast to practitioners, the ethnomethodologist are doing studies with the goal of making the results:

tutorially available to staffs of order production [i.e., members of that particular discipline] as a descriptive/pedagogic order of argument without incongruities, absurdities, without errors of worldliness or facticity, without gaps, omissions, hiding out, faking, or changing the subject; but before everything else, for the work-enhancing edification that the local production staff whose work it describes demands independently of and indifferent to whether staff can prespecify those demands as a condition for making them (Garfinkel, 2002, p. 266).

In place of imposing theory and scientific method, EM studies tries to recover the endogenous rationality and naturally accountable character of interaction, an achievement that requires a vulgar competence in the work of the setting studied *and* an disciplined eye toward the practical interactional details *and* a way of presenting these results in a way appreciated by the “staffs of order production” (ibid.). As Lynch (1997) points out, the policy is not – as it is often claimed to be – a way to put the researcher in a position above others, or providing an ethnomethodological ground zero, but as a reminder that “professionals (social scientists, administrative analysts, and social engineers) do not monopolize the development and use of rules, formulae, algorithms, maps, guidelines, rules of thumb, maxims, instructions, and the like” (p. 372). This attitude of rejecting the FA methods normally applied in social science is often seen as strange and it has frequently created confusion among researchers. Much of social sciences legacy is built on general methods for corroborating or refuting results. What is left if these methods are removed and in what ways are other researchers supposed to make claims about the validity of the results? These questions have often been posed to ethnomethodologists and one occasion that in an illuminating way highlights this confusion, and EM’s seemingly strange answer to these matters, is the Purdue Symposium on Ethnomethodology (Hill & Crittenden, 1968), which was arranged to provide practicing ethnomethodologists and other scholars an opportunity to discuss a range of issues concerning ethnomethodology’s relation to sociology. In the symposium non-ethnomethodologists repeatedly tried to find *general* methodological procedures they could use in order to validate ethnomethodological claims.

McGinnis: What criteria would you accept as grounds for arguing that it is false? What criteria would you require from me to assess my assertion that your claim is false?

Garfinkel: Why don’t you just state your objection? (Hill & Crittenden, 1968, p. 34)

In a comment on this exchange, Lynch (1993) claims that “Garfinkel’s rejoinder casts McGinnis’s *academic* question into a ‘vulgar’ conversational frame” (p. 146). While the question presupposes that Garfinkel’s observation¹⁰ should be able to be tested according to some general criteria of falsification, Garfinkel’s answer was pointing to the particular case and the potential problems with *that* observation (such as incongruities, absurdities, errors of worldliness or facticity, gaps, omissions, hiding out or faking). In this way Garfinkel’s reply questions the rationality of method “not through an explicit argument, but in the way it is submerged into a ‘vulgar’ competency” (ibid.)¹¹. Taking an EM position, there is no time out from ordinary mundane society, no privileged analytic vantage point or method that provide a guarantee of valid results.

It is common to interpret indifference as a claim that EM studies cannot pass judgment or be prescriptive. As have been discussed earlier in this section, approaching practices from the position of EM indifference means refraining from using exogenous theoretical categories when doing analysis and when making judgments. Such indifference does not, however, present any principled objection towards the subsequent *use* of descriptions in forming prescriptive judgments, only towards accounts that *explain* and *analyze* interactions in terms of such normative exogenous categories. Consider this original formulation of EM indifference from Garfinkel (1967):

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. (p. 33, emphasis added)

The emphasis on *outside* is important, since it identifies as a study object the rules or standards for recognizing and talking about efficiency, intelligibility, consistency and the rest, that are used *inside* actual settings, by settings’ members. Thus, normativity can be *part of* descriptions and thereby point to sensible suggestions of prescriptions. Given such an approach, issues of normativity are approached from the standpoint of the *setting*

itself, and the interests and concerns of members. It should thus be possible, in principle, for a vulgarly competent ethnomethodologist to make judgments on *local pragmatic grounds* as to what could constitute an improvement on, for instance, an instructional innovation, provided that the sense of these categories does not derive from an a priori definition but rather from their presence as “professional designations” (Macbeth, 2002) in the setting itself.

FOCUS ON ACTION AND IMMANENT PEDAGOGIES, NOT LEARNING

In studies conducted by Charles Goodwin (e.g., 1994, 1995, 1996, 1997, 2000a, 2000b), the disciplined and accountable nature of competent seeing has been a recurrent topic. In these studies, Goodwin focuses on the actions through which practitioners highlight, make visible and learn to see aspects of their surroundings as relevant objects of their profession and, in relation to this, how professionals construct representations of these socially organized surroundings. Studying the visible and instructable character of competence like this could be seen as a way of describing the “immanent pedagogies by which members master their practices” (Lynch, 1993, p. 273). As we have mentioned earlier, our general interests is in the way that participants in an educational setting are made accountable for the disciplined competence that is purportedly being taught in that setting. In this way we hope to gain a sense of how a subject matter is made visible and instructable, especially with regards to the “interactional bringing to life” of “instructional innovations” (Koschmann *et al.*, 2004). Although Goodwin does not take any interest in instructional innovation or education, we believe they are exemplary examples of how immanent pedagogies can be investigated without resorting to theories of learning. To show what we mean, we provide a rather thorough account of one of Goodwin’s analyses.

Goodwin (1994, 2000a) reports on a study where an archaeological field excavation of a prehistoric village was inspected and recorded. Maps of the excavation site are central to archaeological practice. In order to produce a map, relevant cultural features – such as the remains of a cooking fire and the outlines of the posts that held up a building – have to be marked out. Features are often visible as colour differences in the dirt and in order to produce a map these differences are systematically classified. In one analysed episode, a young archaeologist, Sue, is drawing a map under the guidance of Ann, a senior archaeologist. Seeing as an archaeologist, manifested here as being able to draw a correct map, is a central element of what it means to be an archaeologist. When collaborating in the production of a map, the two archaeologists have to see the scene in common, and see it in a way defined by archaeology as a profession. Since Sue is inexperienced, Ann must organize this professional seeing as a form of public practice by linking her actions to the dirt under scrutiny. In the concerted work of the two archaeologists, some of the embodied methods required to see and define the objects and distinctions central for subsequent description and analysis are made visible. In order to uphold a pragmatic intersubjectivity (Edwards, 1997) sufficient to get the job done, Ann is using different methods to show how the correct way to categorise the dirt is performed, which results in a “progressive expansion of Sue’s understanding, as the distinctions she must make to carry out the task assigned to her are explicated and elaborated [...] such that Sue is finally able to understand what Ann is asking her to do, that is understand in a manner that permits her to make an appropriate, competent response to Ann’s request” (Goodwin, 1994).

Goodwin claims that situations such as the one described, where “multiple participants are trying to carry out courses of action in concert with each other through talk, while attending to both the larger activities that their current actions are embedded within, and relevant phenomena in their surround” (Goodwin, 2000a, p. 1492), could be seen as “the primordial site for the analysis of human language, cognition, and action” (*ibid.*). The reason for the “multiple participants” provision is mainly methodological. It makes available for the analysts, through the members instructions and corrections, how one conducts oneself knowledgeable in the face of a certain task. A related consideration lies in the specific choices of domains of study; the participant frameworks in the settings studied are often asymmetrically organized with respect to competence or “epistemic position” within the field. This provides for, again, the highlighting of the methods that go into the making of a competent practitioner; explicit sequences of repair and instruction of the novice’s actions bring into view what constitutes right and wrong and so make visible the professional competence of the field¹². We claim that these features of the sites and situations studied by Goodwin make them primordial sites for studying, not only language and cognition generally, but also instruction and competence. Through paying close attention to the details of how corrections and instructions are organized in a specific setting, one can gain a sense of how this setting *shows* the subject matter in structured ways. One can then construe the specificity of a setting in terms of how a lived work is done *as* the formal competence of that setting.

Goodwin seldom mention learning in his studies, although he do use normative descriptions such as “progressive expansion of understanding” and “appropriate, competent response”. More importantly, he does not theorize learning. As Goodwin’s studies make obvious, practical reasoning embedded in social interaction can be studied without ever treating it *as* learning. To be sure, people learn stuff, and if the analyst looks at what they do, he or she will see interaction and practical reasoning, and could in some particular cases also see that a person has learned something, but that does not imply that learning *is* interaction or practical reasoning. Learning already has an everyday grammar that involves, among other things, ascriptions of achievement and

judgments about changing competences. But using it as a theoretical term designating something that people *do* constitutes a reworking of the grammar of the word that seems hard to motivate. We believe that analysis would benefit from being indifferent to any such arguments and simply say that learning is, to paraphrase Coulter (1999), “a polymorph of our language” and be content with that. This does not mean that a researcher, by investigating a particular course of interaction can say that a participant has learned something. We propose letting “learning” remain an after the fact characterization and that we refrain from thinking about learning as an object of *theoretical* reflection¹³.

DO HYBRID STUDIES

The notion of hybrid disciplines envisages ethnomethodology as closely associated with the work-practices that it studies: “The intention of the hybrid programme is clear: it is to inform the ongoing professional development of occupational practices whose workaday objects are under ‘praxiological’ study” (Crabtree, 2004). Such a programme would dissolve ethnomethodology into a host of hybrid disciplines taking active part in the development of the studied practices. In the case of education, a hybrid science would be directed at studying educational practice with the intention of partaking in the development of that same practice. Now, the branch of educational research we have been discussing has just this interest: informing the ongoing professional development of occupational practices. Much of the problem with existing educational research, as we see it, is that it deals in theoretical abstractions and tends to miss the interactional “what” of educational practice; and we see ethnomethodology’s contribution as providing the missing interactional what of instructional innovations, what they *are* as “brought to life” interactional achievements. We think that this could be an influential achievement with parallels to how ethnomethodological studies of technology has been received, or as Hester and Francis (2000), puts it:

Indeed, if ethnomethodological studies of technology are taken as a precedent (Button, 1993), then professional educationists may find more of practical relevance in ethnomethodological studies of the detail of educational activities than can be found in other kinds of sociological work. Arguably, it is through such detailed inquiries that ‘self-reflection’ and hence improved practice may best be promoted. (p. 6-7)

In this field, the notion of hybrid disciplines has been developed in discussions concerning ethnomethodological input to technology design. One of the earliest initiatives in this area was made by Button and Dourish (1996), who proposed that design and EM was to forge a “foundational relationship”, and then approach design from a new position (*ibid.*, p. 22)¹⁴. Crabtree (2004) has sought to articulate what could be meant by such a foundational relationship. He sees ethnomethodology and design merging in a new organization of work that is iterative in structure, involving successive alterations of innovations worked up in concert by ethnomethodologists and designers. This hybrid lets the design process as a whole adopt the analytic mentality of ethnomethodology, at the same time as ethnomethodology “dons the practical mantle of design” (Button & Dourish, 1996, p. 22). An iterative way of working is also to be found in several accounts of *design-based research*. According to the Design-Based Research Collective (2003), good design-based research include five characteristics:

First, the central goals of designing learning environments and developing theories or “prototheories” of learning are intertwined. Second, development 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. (p. 5)

This is thus an approach to educational research that has tried to move beyond the purely descriptive explorative variety of qualitative research in education and approach questions of prescriptive judgments that has traditionally been reserved for quantitative or purely theoretical studies. Instead of comparing an innovation against a set of standards, a process of formative evaluation with iterative cycles of development, implementation and study allows the researcher to make an ongoing assessment of how the innovation is working. The outcome is seen as an interaction between context and innovation, a view that eschews randomized trials as the only or even an appropriate way of evaluating an innovation (*ibid.*). It is in such an iterative work that we see a place for ethnomethodology.

The analytic mentality of ethnomethodology, as we conceive of it, is described above in relation to the three first “imperatives”; it emphasizes *vulgar competence*, it is *indifferent to formal analytic theory*, and its adoption in actual studies reveals “seen but unnoticed” organizations of educational settings, through a focus on *immanent*

pedagogies, rather than on theoretical terms such as learning. The contribution of such a mentality to an iterative design-work within education can be said to consist of a short-term influence on specific designs and a long term influence on the methodological and empirical foundations of educational design through, as Heath and Luff (2000, p. 240) phrase it, “taking practical action and human agency seriously”.

As indicated above, vulgar competence enters as a prerequisite for conducting analyses of how learning environments show a subject matter and make instructable relevant competencies. Given the way such analyses reveal the standards of accountability that are used inside the setting – and the endogenous normativity involved therein – partaking in the making of prescriptive judgments should not be beyond the scope of the analyst’s role. This is only true given that prescriptive judgments are based on local pragmatic considerations arising in the actual iterative design-work of which they are part. They are also to be assessed against such local considerations. The way we see the role of the ethnomethodologist in the design process is thus based on a way of thinking that attempts to steer clear of general characterizations, an “in each case” way of thinking, where the claims we make are to be seen as pointing to an imagined iterative design-process. The EM account does not figure here as a stand-alone isolable product, but rather forms part of an on-going practical work of continuously refining and analyzing the way an instructional innovation plays out in practice. In providing design evaluation and analysis with the analytic mentality of ethnomethodology, educational design can move beyond unproductive generalizations and untoward use of formal analytic theory.

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¹ Building on the work of Brown (1992) and Collins (1992), the notion of *designed-based research* or *design experiments* has the last few years been developed in special issues of *Educational Researcher* (Kelly, 2003), the *Journal of the Learning Sciences* (Barab & Krishner, 2001; Barab & Squire, 2004) and *Educational Psychologist* (Sandoval & Bell, 2004).

² When using this method, the researcher codes utterances based on a system of twelve different categories such as “shows solidarity”, “gives an opinion” and “disagrees”. Similar approaches of coding utterances are also common among educational researchers (e.g., 2001). By coding the interaction, events are made statistically analysable and surveyable. On the other hand, coding makes parts of the interaction invisible and the researcher might lose the practical details through which actions and activities are produced and recognized as those of a particular situation; thereby losing the possibility to “discover just what [an] innovation might be” (Koschmann *et al.*, 2004, p. 7).

³ As Rawls (Garfinkel, 2002) maintain, the assumption “that orders is displayed in the concrete details of enacted practices is not only, or even firstly, a theoretical assumption, but also something one feels when observing empirically the patterned orderliness of certain social occasions” (p. 23).

⁴ This formulation is taken from a manuscript that later was presented at the ICLS conference and our paper started off as a direct response to the paper by Koschmann *et al.* Since then, however, their paper has changed form and will be published in a forthcoming book on video research in the learning sciences (Koschmann *et al.*, in press) and as part of a chapter in a book on collaboration, learning and technology (Stahl, in press, chapter 18). When we wrote the first version of this paper, we had only access to the first version of their conference manuscript. Since we are more in agreement with later versions of the text, which might be due to a misreading of the original manuscript, we have reformulated or removed some of the explicit discussion of their text.

⁵ See Plowman, Rogers, and Ramage (1994) for a critique of papers – within the field of CSCW – that “tend to offer a description of a case study, followed by an implications for system design section at the end of the paper in which a number of highly generalisable or semi-intuitive recommendations are made” (p. 4).

⁶ Some research traditions, however, do not follow this scientific ideal. For instance, some *ethnographers* emphasize the importance of *going native* (Malinowski, 1922) while within *hermeneutics* and *phenomenology*, the centrality of the notion of sharing *interpretative horizons* of the societies, individuals or texts under study (Gadamer, 1975) points to similar issues. In a general sense, then, the claim that the researcher has to be competent in relation to the investigated phenomena is not specific to ethnomethodology. This is not the place to discuss all similarities and differences between EM and these traditions, though, especially since ethnography and hermeneutics could mean different things (and sometimes qualify as EM). For further discussion of the relation between ethnomethodology and phenomenology, see Heritage (1984, pp. 37-74) and Lynch, (1993, 117-158). Crabtree (2001) proposes a way of conducting ethnographies under the premises of ethnomethodology and Meehan (1999) discusses some differences between ethnomethodology and traditional ethnography.

⁷ This formulation should not be taken as implying an adherence to a view of a stable and unique foundation of the discipline, a foundation that social science accounts could somehow *depict* or *be about*. The ‘what’ does not afford, or require, exhaustive description, but rather points to the mastery needed, in each case, for membership in the discipline. To emphasize this, Garfinkel’s early use of the word ‘whatness’ (or quiddity) was subsequently dropped for its cognate ‘just-thisness’ (or haecceity), a term with a more obvious indexical character. As Garfinkel himself write: “When Willard Van Orman Quine published *Quiddities* it was clear that quiddities had nothing at all to do with what EM had uncovered. Most emphatically EM studies did not mean *essential detail*. EM is not interested in essential in any sense of generic provision for a properly formulated propertied class of thing. [...] EM studies was not looking for *quiddities*. They were looking for haecceities - just-thisness; just here, just now, with just what is at hand, with just who is here, in just the time that just this local gang of us can make of just the time we need, and therein, in, about, as, and over the course of the *in vivo* work, achieving and exhibiting everything

that those great achievements of comparability, universality, transcendentalism of results, indifference of methods to the local parties who are using them, for what they consisted of looked like, the ‘missing what’ of formal analytic studies of practical action.” (Garfinkel, 2002, p. 99)

⁸ The asterisk following the word “order” is used “as a marker to hold a place for any of the endless topics in intellectual history that speak of logic, purpose, reason, rational action, evidence, identity, proof, meaning, method, consciousness, and the rest. Any of the topics that order* is a proxy for should be read with an accompanying suffix: (order* - in-and-as-of-the-workings-of-ordinary-society. Then the topic of order* would be understood to speak of a *phenomenon* of order*, a practical achievement” (Garfinkel, 1991, p. 18).

⁹ Garfinkel sometimes use the term *classic studies* or *classic methods* interchangeably with *formal analytic methods* and *constructive analysis*. All these terms, in somewhat different ways, point to alternates and alternatives to EM.

¹⁰ From the case study Agnes, reported in (Garfinkel, 1967).

¹¹ In the same symposium, Sacks replies in a similar way when asked to tell “without reference to the subject matter” (p. 41) what an accepted EM “demonstration would be” (ibid.). He does this by reformulating the question: “Do you know what that us asking? You are asking, ‘Could you tell me, without knowing what kind of world we are in, what a theory would look like?’” (ibid.), claiming that he does not “know in the first instance what it is that sociology should look like to be satisfactory” since “that is not an available phenomenon” (ibid.). See Lynch (1993, pp. 144-147) for a more throughout discussion of these exchanges.

¹² It makes visible the lived work that is *glossed* by abstract designations such as “mastery” or “competence”.

¹³ One way of theorise learning that has been criticized by ethnomethodologists is the common distinction between authentic and inauthentic settings (J. S. Brown *et al.*, 1989; Roth, 1995). Hemming *et al.* (2000), for instance, questions the comparison between the authentic everyday learning of language with the inauthentic classroom learning and claim that generalised descriptions of different pedagogies cannot capture the activities that constitute the settings. Instead they claim that the dichotomy between authentic and inauthentic settings “can be little more than rhetorical devices in service of a moral project” (ibid.). Similarly, Macbeth (1996) points out that there is a paradox inherent in the distinction since everything that are commonly ascribed to authentic practices such as “essential indexicality, intertwining, enculturation, and the rest” (p. 274) must also be found in classrooms “in and as the fundamentally situated character of sense and meaning.” (ibid.). As Macbeth argues, since all practices are situated, the notion of situatedness does not offer a way distinguishing between different activities or an empirical or analytical ground for reforming education. He further maintain that the distinction neither works as an analytical criteria since sorting activities into the “right” category would probably only slow down the investigation and direct the attention away from the practical conduct of the participants. In the work of Hemming *et al.*, this line of critique is also directed towards Lave and Wenger’s (1991) notion *legitimate peripheral participation*: “If learning can happen in ‘ordinary settings’, and occur in the course of activities not primarily or explicitly defined as ‘educational’, then what analytic constraints should govern the use of these descriptions? What is it about some activity which warrants the description of it as ‘learning’ and/ or ‘teaching’? Notions such as Lave & Wenger’s (Lave & Wenger, 1991) ‘legitimate peripheral participation’, however useful as the basis of a critique of cognitivist theories of learning, raise the serious methodological question of their own legitimate application. If learning is an unnoticed ‘by-product’ of other activities, activities whose primary participant recognised function is something other than the transmission of knowledge, then when (and on what grounds) is it correct and/ or incorrect to say that ‘learning’ is (possibly, relevantly) taking place?” (Hemming *et al.*, 2000, p. 229). Not only situative accounts of learning makes such transformations of analytical starting points, however, as Cobb *et al.* (1999) notice, in constructivism the “assumption that learning is a constructive process often leads to the slogan ‘telling is bad’ because it deprives a students of the opportunity to construct understandings for themselves.” (p. 12) Taking a social constructivist position would from the same rationality imply that “students should continually discuss their differing interpretations” (ibid.).

¹⁴ Button and Dourish list three different ways that the design-ethnomethodology relationship has been realized in CSCW research, phrased in terms of how design has “learned” from ethnomethodology. First, there is design “learning from the ethnomethodologist”. The rich ethnographic understanding that the ethnomethodologist acquires in conducting her investigations of “user” practices allows her to function as a stand-in for the setting in which a design is to be incorporated. There is thus a division of labour, where the ethnomethodologist provides general ethnographic domain knowledge, and designers use this resource for formulating requirements for design. Ethnomethodology itself gains only a marginal role here, the ethnomethodologist’s contribution being general domain knowledge. From the standpoint of design, she becomes substitutable for any fieldworker with detailed knowledge of the setting. Second, there is design “learning from the ethnomethodological account”, where the division of labour is even more pronounced. In this organization of work, design does not learn directly from the ethnomethodologist, but from the accounts of practice that the ethnomethodological analyses result in. The locus of ethnomethodology as such is more central in this model, in that specifically ethnomethodological accounts are used, which requires of designers the ability to understand and use ethnomethodological analyses. The role of the ethnomethodologist however, is marginal. Third, there is the view of design and ethnomethodology forming a deeper connection, where design as a discipline “learns from ethnomethodology”. This is the alternative preferred by Button and Dourish, and they propose that the design of technology should be informed by specifically ethnomethodological insights about the nature of social interaction, not just from the rich ethnographic knowledge gained by the ethnomethodologist or from specific accounts of practice. They illustrate their point with an example from their own work, where the notion of *accountability* was used to inform the design of user interfaces.

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