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The body in medical work and medical training: An introduction

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Within ethnomethodology and conversation analysis, there is a longstanding interest in the social and practical organization of medical work (see ten Have, 1995). As testified by a large number of publications, encounters between healthcare professionals and clients have also proven to be a generative domain of empirical research. In particular, there are many studies of the communication between physicians and patients in primary care. Through detailed analysis of talk-in-interaction, these studies have examined a wealth of topics and phenomena, including the structure of patient interviews, the delivery of diagnosis and the management of interactional troubles (e.g. Heritage and Maynard, 2006; Stivers, 2007). This special issue draws together scholars from North America, Europe and Japan who use video records to analyse medical work and medical training. The contributors all investigate settings 'beyond the doctor–patient consultation' (Pilnick et al., 2009: 790). While the studies build on previous research on healthcare communication, and take an interest in the sequential organization of talk, they also share a concern for the ways in which visual, embodied and material features are constitutive of the investigated settings – especially the various ways in which the body becomes part of the workplace interaction.

For almost two decades, a handful of researchers and research groups have explored video recordings of operating theatres (Hindmarsh and Pilnick, 2002; Koschmann et al., 2007, 2011; Mondada, 2003, 2011; Pilnick and Hindmarsh, 1999; Sanchez Svensson, 2007; Sanchez Svensson et al., 2009; Zemel et al., 2011). In this issue, there are two studies that continue to investigate interactions that occur during surgeries. Mondada analyses the coordination of surgical teams with a special interest for the ways in which directives and requests are used and responded to. Zemel and Koschmann also look at the use and uptake of directives, but in their case there is a particular interest in issues of learning and instruction. Moving from surgeries to discussions about diagnostic work, Lymer and his co-authors examine how a group of medical specialists attempts to formulate potential 'pitfalls' in the use of a new radiographic technology – how, for instance, the professionals discuss the ways in which the technique renders and refracts bodily structures and entities. Two studies in the issue address the interplay between students

and tutors in dental education. Hindmarsh et al. take an interest in how issues of 'realism' are treated as part of instructional corrections, whereas Lindwall and Lymer examine questions that are posed by students in response to video broadcasts of dental treatments. Like much of the previous work on communication in medical care, Nishizaka's study of obstetric ultrasound examinations concerns an encounter between a healthcare provider and a client. With his focus on the practices employed to invite the pregnant women to differentiate an image on the ultrasound monitor, however, his findings are tied to the material and visual features of the investigated scene and thus move beyond those usu- ally found in doctor–patient encounters.

All the studies in this issue address what Heath (2006) refers to as 'body work' – how professionals look at or into a body and how a body is organized as a site of clinical activity. In the collection, one finds anaesthetized bodies, simulated bodies and bodies whose details are rendered visible in and through images. These bodies are not active parties to the interaction. Although they are acted upon and interacted with, they do not act them- selves. In this sense, the body is treated as a 'Körper', not a 'Leib'. As argued by Hirschauer (1991: 303) in the context of surgery, however, there might still be 'a relationship between the patient's body and the patient's person, which surgery – as a medical science – has to consider because of the life-world esteem for its object'. What this relationship practically consists of, if anything, differs between settings and situations. It is one thing for professionals to discuss anonymous radiographs as part of establishing new clinical criteria. It is another thing to discuss a foetal image with the pregnant women who is being examined. The use of radiographs and sonographs also exemplify how 'body work' is tightly bound up with technologies and techniques. In order to discern the relevant features of a clinical object, there is a need for anatomical visibility. Several of the studies demonstrate the important role of imaging technologies, such as microscopes, endoscopic cameras and ultrasound scanners, in the achievement of this (see also Lindwall et al., 2014; Mondada, 2003; Nishizaka, 2011; Rystedt et al., 2011; Slack et al., 2007).

Throughout the collection, there is an interest in how bodies are practically and interactionally organized as sites of medical work and medical training. But the notion of 'body work' does not only direct the attention towards the presence of anatomical bodies and technology. It also emphasizes 'the body in action' (Goodwin, 2003; Streeck et al., 2011) – especially the embodied conduct of the healthcare practitioners who are doing the work. Previous research has investigated 'the co-ordination of verbal and nonverbal behaviour between the doctor and patient' (Heath, 1984) and 'the organization of talk, gaze and activity in a medical interview' (Psathas, 1990; see also Frankel, 1983). Continuing this line of inquiry, several contributions take an interest in how talk is coordinated with gestures and other embodied conduct. In relation to the investigated settings, this approach raises a number of challenges. Given that concurrent courses of actions and operations may be more or less interwoven to accomplish the business at hand, the sequential organization is far from straightforward (Goodwin and Goodwin, 1987; Mondada, 2011). Neither is it self-evident how the bodily comportment and the use of instruments are to be included in the sequential analysis of interaction (Streeck et al., 2011). Perhaps even more important is the question of whether medical work, or instrumental actions more generally, can be analysed in similar ways to talk-in-interaction. Performing surger- ies or root canal fillings are not primarily communicative or verbal activities; they concern

the work of 'eyes and hands' (Latour, 1986). A central issue is thus to what extent established ways of analysing social interaction are applicable when the investigated actions and operations are aimed towards the achievements of clinical procedures rather than the establishment of intersubjective understandings or the progression of communicative exchanges.

In his commentary in this issue, Macbeth raises a number of concerns similar to this. As he points out, there is always a risk that the disciplined analysis of workplace interaction misses the identifying details of the work it aims to investigate. Or, as noted by Bjelic and Lynch in another context, social scientists might 'find it more sensible to investigate how doctors interview patients or inform them of diagnostic outcomes than to investigate how they organize diagnosis. What gets lost in the bargain are the uniquely identifying features of the work studied' (1992: 76 note 3). With a shared interest in tools, visual displays and embodied actions, the contributions to this issue all move from a focus on institutional talk to a broader conception of workplace interaction. But finding regularities in the ways in which words, gestures, tools and gaze are coordinated is not in itself sufficient for capturing the situated and emergent organization of the actual work. Professions like surgery, dentistry and radiology rely on an extensive set of skills and a large amount of knowledge. Without the relevant skills and knowledge, it is impossible not only to perform the work, but also to fully understand and appreciate what the practitioners are doing. Video recordings, augmented by field studies and collaborations with medical practitioners, have provided an invaluable resource for analysis. Nevertheless, the investigated settings all present challenges with regards to the intelligibility and recognizability of medical work.

Of course, the problem of following, understanding and presenting medical work is not primarily one for social scientists. It is also something that has to be addressed in medical training and has consequences for how education in various professions is organized. In order to learn how to perform a surgery or find a root canal, it is not enough to just read textbooks or listen to lectures. At the same time, novices cannot just start practising clinical procedures without risking the health and safety of the patient. There is a need for educational arrangements that secure both the development of professional skills and the safety of current and future patients. One candidate is clinical demonstrations which allow students to see anatomical structures, pathological features and contingent enactments of formal procedures. However, as demonstrated in this issue and elsewhere (Hindmarsh, 2010; Hindmarsh et al., 2011; Lindwall et al., 2014; Mondada, 2003, 2011), it is one thing to see a medical practitioner move his or her body in certain ways and another thing to see these movements as meaningful clinical actions. Novices also need to practice their skills under controlled forms – either on living patients or in simulated scenarios (Koschmann et al., 2011; Rystedt and Sjöblom, 2012). Given that this means that they engage in clinical activities before they are fully able to see and understand them in professional ways, their actions are regularly monitored, assessed and guided by experienced practitioners.

The studies show how student mistakes occasion instructional corrections, how instructional demonstrations are followed by enactments of the demonstrated actions and how student questions are responded to with instructional accounts. In the titles of the studies, there are phrases such as 'instructional corrections', 'instructed perception', 'instructed

experience' and 'instructable observability'. Not all references to 'instruction' have to do with the interaction between students and teachers. In Nishizaka's study, 'the healthcare providers can be said to have instructed the pregnant woman in how to differentiate the image of the target body part as a figure from the background'. There is also a sense in which 'instructions', as a more general term for 'directives' or 'requests', have to do with divisions of labour rather than differences in knowledge – as in the fluent cooperation between a surgeon and an assistant. The response to the surgeon's instructions in Mondada's contribution 'rely on the professional vision and competent skills of the team members, constantly scrutinizing the dynamically changing anatomy to identify the rele- vant details here and now, defining the intelligibility of the directives'. This points back to the issue of the 'uniquely identifying features of the work studied' – how the study of such features requires the explication of that on which the workplace interaction relies. Concluding this special issue, Macbeth discusses Garfinkel's treatment of 'instructed action' as something prior to sequence organization and turn design (Garfinkel, 1996; 2002). Besides providing a collection of studies of 'body work' in clinical practice, this special issue thus offers central insights into the topic of instruction.

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