In Introduction: why study communication in surgical practices?
Communication in surgical settings is crucial for how healthcare practitioners manage, organize and solve tasks in their everyday work practices. The effect and success of patient treatment (be it in consultations, during operations or in the handover of patients etc.) is directly coupled to the level and quality of communication with patients as well as between team members (Amalberti, 2013; Kohn et al., 2000). The medical practitioners have to act and make critical decisions while managing fluid teams in an unpredictable clinical context. Medical practitioners thus need knowledge of how medical teams function, how practitioners interact, and how to develop the skills required. Further, knowledge about how empathy emerges and what patients seek in consultations and other related contexts are of crucial importance for the practitioner. Based on those assumptions, surgical settings link multiple perspectives that span interpersonal communication, clinical skills, interprofessional teamwork, effective work strategies, and cultural and organisational norms. In this multidimensional perspective, medical departments must organise a stimulating and trustful work environment that facilitates a learning attitude towards all of those areas. The editors of this volume argue, that there is a gap in the literature because traditional research within this field take a monological perspective on communicative actions in surgery.

Communication in Surgical Practices (hereafter Communication) provides an alternative to traditional monological approaches as it brings together multidimensional views on communication in surgery: “This collection provides a view of many, but not all, of the communication activities within the practice of surgery” (White and Cartmill, 2016:4). Based on naturalistic audio and/or video-data, Communication explores the hows of communicative actions in different contexts related to the surgical practice, i.e. the operating theatre (White et al, 2016:10). Communication aims at three things: First, it explores what is taken for granted, the tacit aspects of skilled medical behaviour, i.e. the non-technical elements of surgical practices that appear to be just as fundamental for successful outcome as the medical, clinical knowledge itself. This endeavour
opens up for an understanding of the complex cooperative actions that serve as the glue of interaction in surgical practices. Second, it provides an overview of the literature within its field, which lead to the third purpose: a discussion about future research and specific recommendations especially with regard to educational challenges and possibilities.

*Communication* is divided into three main sections, that explore areas in and beyond the operating theatre: (a) the consultation (b) the operating theatre and (c) the aftermath. The first explores the (dys)functions of various interactional structures or communication strategies when the surgeon consults the patient on future scenarios. It pivots among other things on how negotiations and decisions are managed, how cultural constraints affect dialogical rapport and how interactions are structured in various ways with various outcomes. The second part investigates how surgical teams coordinate actions in a socio-technical environment in order to maintain efficient and dialogical work practices: this part includes investigations of the function of material, technical artefacts, bodily positions, verbal categories and strategies as well as non-verbal, cultural communicative behaviours. The final section considers contexts beyond the consultation and the operating theatre where communication proves to be just as crucial for patient satisfaction and outcome as the operation itself. Often, such post sessions are constrained by the complexity that saturates for instance handover practices and information-dense situations related to the patient’s situation.

*Communication* is heavily based on conversational analytic contributions, but it invites other qualitative approaches as discourse analysis, systemic functional linguistics and pragmatics to contribute with perspectives on the topic.

In this review, I do not go through each chapter, rather I draw on results from the chapters in order to discuss the value of the volume in relation to recent developments within the field of human interaction in medical, surgical settings.

### 2 The supremacy of verbal utterances in a turn-taking system

The chapters 1-7 explore the consultation practice and how mutual understandings are successfully developed and maintained through interaction. The chapters often result in conclusions that demonstrate a particular structural organization of interaction in the surgeon-patient meeting. However, in chapter 2 for instance, very long transcripts and short analyses often make the authors jump to conclusions or generate potential results: “James also used self-disclosing statements *(we are going through exactly, exactly the same thing)* to adopt a “personal voice” that would build solidarity, enhance rapport and increase his approachability” (Yates and Dahm, 2016:46). It is unclear whether
the *would* relates to actual findings or a potential good strategy? And further on p. 56: “…but continued with a terminology-dense account which may have not only increased anxiety but also have had a distancing effect” (Yates and Dahm, 2016:56) and finally: “…to name the patient’s feelings, culminating in his question about “suicidal ideation”, potentially distanced the patient and detracted from his approachability as a medical practitioner” (Yates and Dahm, 2016:58).

The chapters, in general, do reveal important features of the interpersonal dynamics that play a role for the treatment efficiency and well-being of the participants involved. For instance, insights about how forms of address, greetings, role-framing, information structure, power relations etc. affect particular decisions and understandings of the situation significantly are showed in data analysis. However, all seven chapters remain focused on the verbal exchanges between interlocutors, even though many of them underline the importance of multimodal coordination (or nonverbal communication). Further, many of the chapters are based on studies that use video-ethnographic approaches, but in the actual analysis, only verbal transcriptions constitute the basis for analysis. While transcriptions are no more than a linguistic surface of complex co-operative actions within and between humans, I question some of the findings as we lack information of many other dynamics that could explain why a certain structure or communicative strategy proves useful or not. Much is left out when studies are based on identifications of turns revealed in transcriptions. CA’s focus on turns has been related to production of speech. Its history of dealing with verbal turns *ad litteram* becomes its biggest obstacle. When interactions are transcribed verbatim, there is a risk that non-verbal actions are reduced to simple meaning transporters, and their dynamical characteristics are replaced by symbolic values. Thus, in the transcripts, only ‘meaningful’ actions are annotated (head nods, gaze orientation and gestures as pointing toward something in the same way as a verbal deictic marker). Remarkably, such actions are assigned the same rules as those valid for analysing verbal utterances. At worst, the non-verbal actions are completely ignored and it is hypothesised that this is due to the sociological explanatory framework that often works for verbal utterances but might be inadequate in the study of inter-bodily dynamics.

Although CA defines talk-in-interaction as its unit of analysis, its close-knit methodology primes the attention of the analyst to identify words in sequences of turn-taking. In such cases, dynamics extending beyond turn-taking will not be registered. In fact, CA methodology has, over time, accumulated a theory of conversation, but none of the researchers explicitly reflect on the limitations of the methodology they use. If the authors maintain that CA and similar approaches are
the best to apply in such studies, such methodological issues should be discussed and weighted against alternative qualitative methods.

In the second part, however, video is being integrated as an actual part of the empirical analysis and it generates new perspectives on the complexity of what happens in the coordination of task performance.

3 Embedding surgical interaction in a cultural-material environment

The benefits of video-ethnography are demonstrated in the second part of the volume. This part appears more open to newer approaches in human interaction. For instance, we are presented to embodied and distributed perspectives on local cooperation (Goodwin, 2013; 2014).

Chapter 8, with its starting point in systemic functional linguistics, emphasises how various space-figurations invite different contexts of meaning potentials (Butt et al, 2016:187). The value of this chapter lies in (a) its ability to integrate how history and culture saturate local interactions (see the Figure 8.7 on pp. 190) and (b) the fact that they treat activity as embedded in an eco-social system with a lived experience that makes a difference for local action. Finally, while the chapter provides convincing examples of the importance of gestural and proxemic mode in interaction, the actual analysis is missing. The chapter claims to have impressing 50 hours of video recordings, but spend only a couple of pages on presenting the results of the analysis, and no transparent analysis is provided the reader. Why not show it, rather than only tell it? (see e.g. pp.196). In fact, we are only presented with two brief narrated examples that serve as the basis for huge conclusions related to significant dangers. However, it is not quite clear whether those conclusions are deduced from the data or potential theoretical dangers not experienced in data?

The value of video-based analysis, which moves beyond verbal transcriptions, appears most clearly in chapter 9, where attention is paid to how visual action-perception cycles reveal important knowledge about practitioners’ level of competences and skills. With Goodwin’s notion professional vision, Mondada (chapter 9) shows how practitioners’ level of knowing how to detect relevant information in their environment affects action possibilities in the local (Mondada, 2016:219).

One of the volume’s ambitious aims was to investigate what actually happens in the operating theatre. Drawing on rich multimodal analysis, chapter 10 provides convincing examples of how interaction is understood beyond verbal, structural organization of talk. The chapter provides what is at heart of this volume: the communicative complexity in surgical situations by showing how
responses are truly embodied, i.e. sometimes expressed mainly by verbal answers, yet other times through nonverbal bodily movement – and this is discussed in relation to (dys)functional outcomes. Obviously, such findings are crucial in the work of revising or designing optimum safety guidelines: what and when is a certain response-type required, e.g.

However, even if the chapters in the second section bend the bow pretty far when analyzing interaction beyond the verbal organization of talk, it lacks a stronger connection to the literature on materiality in interaction. For instance, as chapter 11 takes up a relevant question about body alignment and its function in relation to engagement in surgical team practices, it shows how body engagement relates to coordinated actions: who needs to do what by negotiating patterns of movements. However, the analysis lacks a sensitivity towards the materiality and physicality of the setting; the context is important for the function of the movement organization, see e.g. case 11.7 (Moore, 2016:278). By extending interaction to involve the tools and artefacts used in coordinating action one could open up for richer understanding of how negotiations are managed and constrained. Many tools and artefacts in the medical ward facilitate communicative and cognitive actions, not by extending the action space, but by structuring it (cf. Kirsh, 2013; Pedersen and Steffensen, 2014; Trasmundi and Linell, 2017).

4 Communication matters
All chapters show in various ways how communication matters for functional task performance and good outcomes at a medical, interpersonal and emotional level. The final section provides examples of how various situations beyond the consultation and the operating theatre are handled – e.g. open disclosures in surgical practices. However, there are no solutions to the crucial challenge of how emotional alliance emerges, is constrained, facilitated etc. A mere structural performance of three legs in open disclosures are not necessarily creating a dialogical and trustful atmosphere, even though it might be a good strategy for doing what is right. While it is acknowledged that many chapters reflect on educational challenges and even future communication initiatives, very often the result is adding or revising checklists, guidelines and broad communication strategies, as e.g. in chapter 16. Pedersen (2015) amongst others underlined how this is not the best solution to avoiding communicative errors in medical situations. Paradis et al. (2014:235) argue that there has been “an expansion of intervention studies to design, implement, and evaluate either an interprofessional checklist or clinical guidelines or protocols” but a reduction of negative outcomes is not achieved by adding even more procedures into the work practice. According to Leape (1994): “The most
fundamental change that will be needed if hospitals are to make meaningful progress in error reduction is a cultural one” (Leape, 1994: 1857). It is relevant to discuss such findings in relation to the final section of this volume.

4.1 Challenges in interaction research
The volume should be acknowledged for bringing together multiple perspectives on interaction. Especially the second section provides analyses that push traditional interaction analysis in new directions. However, building on multimodal data requires high quality data representation. In all chapters, where images are integrated into the analysis, it is difficult to see important details in the figures. To give a few examples, see pp. 225, 242, 271. If galleries are used, they should be in high quality and even organized into analysis aided by explanations, information (e.g. by indicating who is who). There are cases (for instance on pp. 271), where it would be valuable to indicate the roles on the pictures as well as naming or framing the relevant artefacts used in the analysis. Further, pure screen dumps of ELAN-coding appear unprofessional and should be developed into visual, regular figures and verbal cues could be given too (cf. Goodwin’s annotation style).

5 Conclusion
Communication is ambitious. It sets out to reveal the complexity of interaction in natural surgical situations. An impressive amount of empirical data material provides the basis for thoughtful analyses. Unfortunately, much of the data material is left out in actual analysis, and only few contributions integrate video material into the analysis. Consequently, the complexity of the interaction is only partly explored, as the analyses remain verbatim structural analyses of turn-taking sequences. That said, the volume offers interesting and different perspectives on how interaction is structured and managed through embodied negotiations. Some contributions even show how timescales transcend the here-and-now encounter and affect local decision-making and cooperative behavior. The true value of Communication lies in its three-dimensional focus on different but interrelated contexts in and around the surgical setting: the consultation, the operating theatre and the aftermath. Further, the volume brings together different approaches to provide a richer methodology for the overall study. Finally, what makes Communication important is its detailed analyses, which provide a valid basis for discussing what has been perceived as tacit understandings of surgical interactions.
If interaction is grounded in human bodies with a lived history, as some of the authors underline, the methods used should be developed in accordance with such assumptions. In this perspective, verbal transcriptions and claims about language as a turn-taking system do not seem to cover the complexity of the dynamics in interaction. This imbalance might be a next important methodological step to develop.

References


