‘Get me the airway there’: negotiating leadership in obstetric emergencies

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Abstract

The paper discusses leadership enactment in the context of simulated obstetric emergencies. We draw on video recordings and investigate how senior clinicians ‘do being the leader’ discursively in the spatiomaterial context of the emergency room. We take a combined Conversation Analytic/Interactional Sociolinguistics approach and look specifically into the ways in which professional roles do interactional control using directives, questions, and material space. We discuss this interactional performance in relation to the clinical performance of the teams. The analysis shows that leadership is multimodally achieved; professionals draw on discursive strategies, the affordances of material space, body, and gaze orientation which build on each other and converge in indexing leadership (or not). Our findings confirm the situated nature of leadership, illustrating that seniority in our context is claimed, projected and resisted discursively. We close the paper by foregrounding the implications of our study and provide directions for further research.

Introduction

This paper is concerned with leadership negotiation in simulated obstetric emergencies. We understand medical leadership as an embodied phenomenon and we combine the well established Conversation Analytic (CA) and Interactional Sociolinguistics (IS) traditions to look at how the available multimodal resources, and particularly material space, are mobilised by different professional roles in our context. We draw on Holmes & Marra (2004:440), who define effective leadership as ‘consistent communicative performance which results in acceptable outcomes for the organisation (task-oriented), and which appears to maintain harmony within the manager’s team or community of practice (people-oriented)’. Drawing mainly on workplace sociolinguistic literature, we pay particular emphasis on the ways interactants ‘do being a leader’ discursively in their context (Holmes & Marra 2004; Vine, Holmes, Marra, Pfeiffer, & Jackson

Keywords: leadership, embodiment, multimodality, emergency care, expertise, Interactional Sociolinguistics
The concept of doing is central in the IS/CA agenda and places emphasis on the situated and co-constructed nature of interaction. Accordingly, we discuss what leadership in the obstetric room looks like from the perspective of the clinicians. We pay special attention to the multimodal achievement of floor management. Earlier research has repeatedly shown that claiming, holding and opening/closing the floor is directly related to the enactment and resistance of power structures in workplace discourse (Vine 2004; Svennevig 2012; Angouri 2018) and to the ways leadership is done in interaction.

Through the analysis of video recordings, we show that senior professionals do being the leader multimodally; they draw on discursive strategies, material space’s exploitation, body, and gaze orientation which build on each other and converge in indexing leadership (or not). We discuss how the spatial design provides the context within which bodies act. Positioning in this context is part of claiming roles and responsibilities and we analyse movement in and out of spatial zones. Our discussion zooms in on the use of questions and directives which are well studied strategies for doing interactional control. We focus on epistemic authority, the enactment of expertise and the ways in which professionals (attempt to) control the interaction in the material space of the maternity room.

Our paper aims to address a critical and long overdue gap in the literature in relation to the embodiment of leadership and medical outcomes in secondary care and contributes to leadership studies. In recent years, leadership has been extensively studied as situated and interactionally achieved, mainly in business meetings (e.g. Alvesson & Sveningsson 2003; Holmes & Marra 2004). However, there is still need for research on this topic, as ‘despite the recent interest in discursive approaches to leadership, relatively little research actually provides fine-grained analyses of how leadership is dialogically achieved in interaction’ (Clifton 2012:148). In the context of healthcare, and particularly in medical emergencies, which are widely under-researched, this need is even more imperative. Further to this we focus on material space and expand on the concept of zones of expertise (Sarangi & Clarke 2002), arguing that this also involves body position and movement in the material space of the obstetric theatre.

We have organised our paper in three parts: first, we provide an overview of relevant literature, including previous research on leadership in healthcare settings, the embodiment of leadership, and directives and
questions as control mechanisms. We then turn to the methodology we advocate and the analysis of our data set and finally we draw conclusions and discuss areas future studies need to address.

Healthcare leadership

Leadership studies in medical contexts have primarily focused on trauma teams. The literature has privileged the analysis of verbal communication; Jacobsson, Härgestam, Hultin, & Brulin (2012), for instance, examine trauma teams in emergency situations, revealing the different repertoires leaders use to convey their knowledge to the team. Yun, Faraj, Xiao, & Sims (2003) focus on trauma resuscitation teams and in their findings the effectiveness of different leadership styles (directive/empowering) depends on: (1) the severity level of patient condition; and (2) the level of team experience. Sarcevic, Marsic, Waterhouse, Stockwell, & Burd (2011) also examine teamwork in trauma resuscitation teams, identifying common leadership structures.

Apart from trauma teams, research on leadership has been conducted in operating room teams. Edmondson (2003) focuses on teams learning to use a new technology for cardiac surgery, reporting that ‘the most effective leaders helped teams learn by communicating a motivating rationale for change and by minimizing concerns about power and status differences to promote speaking up in the service of learning’ (2003:1419).

More recently, Endacott, Bogossian, Cooper, Forbes, Kain, Young, & Porter (2015) examined nursing students’ and registered nurses’ teamwork skills whilst managing deteriorating patients, and found a correlation between technical and nontechnical scores. Among the themes emerged from their qualitative and quantitative analysis, of relevance to our study are the leadership and followership behaviours. Specifically, although the interviews revealed team members’ willingness to challenge the team leader and their sense that this is acceptable, this was not visible in the video data. This underlines the need for further research on leadership negotiation in medical contexts.

Even though there is some evidence in trauma and operating teams, there is an almost complete void of studies in contexts where the patient is awake and an active member of the event. This is the case of
obstetric emergencies, which our study aims to address and it is also relevant to current debates on the embodiment of leadership which we discuss next.

Leadership as embodied performance

Despite the recent interest in discursive approaches to leadership, little attention has been paid to its embodied performance, including its material aspect. The gap is pointed out by Küpers (2013:335), who discusses the ‘prevailing marginalization [...] of the body in social, organizational and leadership theory and practice’. The significance of materiality for understanding organizational control is also pointed out by Dale (2005), who underlines that ‘it is the social-and-material embodied actor who enacts social control’ (2005:655). Ropo & Parviainen (2001) also make a contribution towards this agenda, arguing in favour of a bodily dimension of leadership knowledge, while in a more recent work, Ropo & Salovaara (2018) develop a sociomaterial approach to leadership, focusing on the relationship between the human and the material as embodied spatial engagement. Their perspective differs from our current view of materiality and embodiment as referring to qualities and actions of physical bodies. However, their understanding of space as performative and active is directly relevant to our argument in favour of the performative aspects of material zones in relation to professional roles.

The embodied dimension of leadership is even more under-researched in healthcare contexts, and more specifically, in emergencies. There is evidence, however, of the role of multimodality in doctor-patient interactions. Studies have shown that while interacting with patients, doctors perform a variety of tasks (speaking, reading, writing prescriptions, etc.) through the mobilisation of verbal and nonverbal resources (gesture, body posture, gaze, and object manipulation) (Pasquandrea 2011:456). Focusing on embodied leadership, there is a gap in studies taking an interactional perspective. Researching material space and its exploitation in this context is demanding, as it usually involves video recordings, rendering access difficult. Despite this, there is some evidence of the crucial role space plays on teamwork, underlining the need for further investigation.
Particularly relevant to the present study is previous research on the ways space impacts on the specific context we investigate, namely medical emergencies. For instance, Siassakos, Bristowe, Draycott, Angouri, Hambly, Winter, Crofts, Hunt, & Fox (2011), drawing on the same data, have identified space as a possible factor affecting clinical efficiency, reporting possible relationships between teams’ clinical efficiency and: a) the number of members’ exits from the labour room, and b) having a leader with a higher global situational awareness. Büscher’s (2007) work brings evidence of the crucial role of embodied conduct and movement in coordinating emergency teamwork, making an interesting point that embodied behaviour is a crucial contributor to the ‘economy’ of interaction aimed at achieving an appropriate emergency response efficiently and swiftly. This further supports our focus on multimodality in the fast paced environment we investigate.

Evidence on the crucial role of space has been also provided by operating teams. Bezemer, Cope, Kress, & Kneebone (2011) analyse interaction at the operating table and show how surgical trainers and trainees coordinate their actions using all communicative resources available to them. These include speech, gesture, gaze and posture, as well as the use of instruments. In the same vein, Hindmarsh, Reynonds, & Dunne (2011) focus on interactions between members with different status, arguing that the investigation of interaction is difficult without taking into account the participants’ embodied conducts and their mutual monitoring. Their multimodal analysis shows how trainees follow dentists’ instructions in an embodied way: trainees’ attention, interest and understanding is made visible through their body postures. These studies’ focus on members with different status and the ways they achieve coordination are particularly relevant to our context, where teams consist of staff members with different levels of seniority, too. We discuss this in the light of our data to show how the teams achieve this coordination of action and perform their different roles drawing on the available multimodal resources.

A concept particularly relevant to our work is the zones of expertise (Sarangi & Clarke 2002), which are demarcated by professionals through the mobilisation of certain discourse strategies. Sarangi & Clarke claim that medical professionals delineate their (in)expertise ‘through a systematic deployment of a range of modalized discourse strategies [...] while claiming authority in a limited knowledge field’ (2002:139) and focus on how ‘(dis)claiming of knowledge is accomplished through the delineation of different zones of
expertise’ (2002:145). We discuss later the identified set of discourse strategies mobilised by the professionals in our context in order to demarcate their zone of expertise and claim authority.

In our context, the epistemic authority is institutionally predefined to the senior doctor, who has the ultimate responsibility of the event. This is often associated with senior doctors’ exhibition of leadership. However, the senior doctors’ institutional authority does not necessarily go hand in hand with their enactment of leadership as we will show in our data later; this is not static but locally enacted by the senior doctor or negotiated and directly challenged by other professional roles.

The particular interactional features we consider in order to study the phenomena we are interested in are the use of directives and questions. We discuss this next.

Directives and questions as control devices

In this paper we pay particular attention to the role of directives and questions, as they have been widely identified as discursive control devices in the workplace.

According to Pearson (1989:189) ‘controlling speech acts or directives, occur profusely in ordinary situations where people are set on accomplishing tasks’, as is the case in our context. ‘Directives’, or ‘control acts’ are speech acts intended to get someone to do something. Direct and explicit directives tend to be most frequent in routine instructions from superiors to subordinates and typically concern routine tasks (Holmes & Stubbe 2015). Vine (2001) explores power by examining directives as a form used to express ‘control acts’, which is directly relevant to our work, as we also identify directives as a mechanism of power enactment. In a more recent work, Vine (2009) identifies imperatives as ‘a direct forceful way of issuing a directive, while the use of an interrogative form, especially modal interrogatives using can or could, are much more indirect and less forceful’ (2009:1399).

The association between questions and issues of power has been mainly investigated in corporate business settings. Holmes and Chiles (2009), for instance, analyse questions as devices used by managers to exert control over the discourse and behaviour of people at work, reporting how questions function, among others,
as ‘very effective means of managing the agenda, eliciting agreement to decisions, and constraining responses on occasion’ (2009:206). Questions have also been placed at the centre of sociolinguistic decision-making research. Halvorsen (2018) reports on the strategic function of questions in an operational planning meeting, where questions drive ‘the decision-making trajectory in specific directions by setting the agenda and constraining subsequent interaction’ (2018:69). In the same vein, Aritz, Walker, Cardon, & Li (2017) explore the performative role of the questions which are used by professionals as a way to construct their identity and establish leadership, showing how questions ‘can also be used to direct team members, seize the floor, and influence decision making’ (2017:161).

Questions have been also discussed as mechanisms of interactional control in contexts other than business, and have been related to the indication of epistemic status; Heritage (2012) examines every day interactions and provides evidence that ‘epistemic status is fundamental in determining that actions are, or are not, requests for information’ (2012:7). Similarly, Mondada (2013a) shows the way in which epistemic authority is claimed and negotiated, arguing that although questions in an initial position are generally produced by the guided, assuming a not knowing status, and questions in second position are generally answered by the guide, assuming a knowing status, the reverse is also possible, and indicates an alternative claim of epistemic authority. In our work we draw on Mondada’s classification of the function of questions and show how different types of questions are used by professionals to both maintain role boundaries and also to challenge senior doctors’ institutional authority.

Methodology

Context

We draw our data set from a randomised controlled trial of training for obstetric emergencies (Simulation & Fire-drill Evaluation Study)\(^1\), where emergencies with a patient-actor have been video recorded in six sites in the UK. In these episodes, ad hoc teams handled the same obstetric emergency, eclampsia, without knowing the nature of the emergency before entering the room. The episodes last approximately 10-14

\(^1\)Simulation and Fire-drill Evaluation (SaFE) Study, Department of Obstetrics and Gynaecology, North Bristol National Health Service Trust, Southmead Hospital, and University Department of Clinical Sciences at South Bristol, University of Bristol, UK.
minutes each. Teams usually, but not always, consisted of one senior doctor (SD), one junior doctor (JD), two senior midwives (SM1 & SM2) and two junior midwives (JM1 & JM2).

Medical emergencies are a fast paced work environment characterised by high pressure and where time is crucial, because of the nature of emergency. The importance of time in our context is well argued by Gillon, Radford, Chalwin, DeVita, Endacott, & Jones (2012:230), according to whom there is an ‘inherent risk of error related to the time-critical, high-stakes environment’. Edmodson (2003) considers emergency medical teams as an exemplar of action teams, which are defined as teams in which members with specialized skills must improvise and coordinate their actions in intense, unpredictable situations.

Another factor that adds to this particular setting’s complexity, requiring investigation, is the ad hoc formation of the teams. Although leadership and teamwork have been extensively studied, ‘much of it has focused on functions and behaviours of leaders of stable teams, such as those found in production and development teams’ (Sarcevic et al 2011:227). Hunziker, Johansson, Tschan, Semmer, Rock, Howell, & Marsch (2011), and Hunziker, Tschan, Semmer, & Marsch (2013) review teamwork and leadership in resuscitation work and report that compared with established teams, ad hoc teams showed less leadership and a worse team performance, with the higher performance of preformed teams having been consistently demonstrated in other contexts, too. This provides further evidence to the importance of context in the study of leadership. Previous work by our team (Authors 2, 3, 5 and 6) has started addressing the perceived traits of a ‘good’ leader in this context. Bristowe, Siassakos, Hambly, Angouri, Yelland, Draycott, & Fox (2012) investigated obstetric teams’ beliefs about effective teamwork in emergency situations. In their findings, a good leader is expected to be calm, confident and not seem panicked, as ‘if the person who’s leading is panicked and shouting and chaotic then it filters through’ (2012:1386). We will show how misalignment with these ideals does come with interational trouble in the data set.

Data set & Methods

We draw here on eight episodes (named Case 1, 2, 3, 4, 5, 6, 7, and 8). These have been selected on the basis of a) team completeness, b) distribution of performance, and c) appropriate sound/image quality.
Specifically, teams handling the emergencies there are full teams working in four different maternity units in the same geographical area in England, including teams with high, low and medium clinical performance. Through the analysis of teams across the clinical ranking we aim to get an insight into the relationship between interactional and clinical performance. The teams’ clinical efficiency ranking is based on the administration of magnesium sulphate. The methodology for this clinical ranking scheme is described in detail in Siassakos, Draycott, Crofts, Hunt, Winter, & Fox (2010). The ranking of our sample is provided in Table 1 (from best to worst clinical performance).

Table 1. Teams’ clinical performance

<table>
<thead>
<tr>
<th>Time frame for magnesium administration</th>
<th>Episodes</th>
<th>Score interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium administered &lt;5 minutes</td>
<td>Case 1, Case 2</td>
<td>Good clinical performance</td>
</tr>
<tr>
<td>Magnesium administered 5-6 minutes</td>
<td>Case 3, Case 4, Case 5</td>
<td></td>
</tr>
<tr>
<td>Magnesium administered &gt;6 minutes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magnesium drawn but not administered</td>
<td>Case 6</td>
<td>Poor clinical performance</td>
</tr>
<tr>
<td>Magnesium obtained but not drawn</td>
<td>Case 7, Case 8</td>
<td></td>
</tr>
<tr>
<td>Magnesium not obtained</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The analysis takes a combined CA and IS informed approach. Our transcription of the data is following a simplified version of the Jefferson transcription system (Jefferson 2004). The excerpts are supported by images and integrated multimodal information when this information is interpreted as significant for the participants. More, the extensive CA work on floor management and turn-taking and its conceptualisation of space feed into our analysis. In contrast to the IS approach, conversational analysts have discussed more extensively the importance of space and focused on its exploitation in interaction, viewing space and speech situation itself as interactively achieved. At the same time our work is situated in the IS tradition which
brings together the micro- (here-and-now interactions) and macro-level (broader environment within which the interactants operate). As the starting point of our analysis is the senior doctors’ institutional role and their ways of doing leadership, the IS approach becomes particularly relevant. Recent work in IS has shown how the framework is useful for exploring ‘interactions in which there are significant differences in the participants’ sociolinguistic resources and/or institutional power’ (Rampton 2017:2). Although IS has not been traditionally used for exploring issues of power and politics, recent work revisits its affordances and makes a case for the relevance of the framework for a critical study of professional interaction (see Angouri, 2018 for extensive discussions).

Our analysis shows that claiming authority is situated in space and that senior members do being the leader through mobilising the following interactional resources:

1. positioning in material space; marking the material zone around the bed as their zone of expertise
2. multimodally managing the interactional floor, selecting both speakers and topics using:
   a. directives
   b. questions

Senior members draw on those strategies to demarcate their zone of expertise, while claiming authority. In our work we extend Sarangi and Clarke’s (2002) concept, showing that these zones of expertise are also material. In short, positioning in space is part of claiming professional roles.

We discuss these core discursive strategies in turn below, starting with the material zones.

Material zones

The observation of the episodes through a multimodal lens has resulted in the identification of five significant material zones in the emergency context we focus on: one out of the room and the following four in the room: left bedside, right bedside, foot of the bed, and equipment table. These are shown in Image 1.

Image 1. Main positions in the maternity room
The analysis of the members’ positioning and movements in relation to those zones has revealed systematic patterns among professional roles which are visualised in Image 2.

Image 2. Visual representation of professionals’ material zones

Image 2 depicts the maternity room where medical teams act and we have used coloured lines to mark medical professionals’ preferred spatial zones. The red line marks senior doctors’ spatial zone, the yellow line stands for junior midwives’ spatial zone, while the blue line shows senior midwives’ preferred space. The dashed lines represent lower frequency and the arrows indicate the exit of the room.

The reason why junior doctors are not depicted in Image 2 is that in the current data they exhibit great variability in their multimodal behaviour and no patterns have emerged; this will be further discussed in relation to Episode E.
We show below that senior doctors act in the material zone around the bed, and mostly at the bedsides, marking, in this way, the zones closer to the patient as their territory. By positioning self at the centre of the room and close to the patient, they also position self at the centre of the event. This is part and parcel of claiming epistemic authority in supervising the allocation and execution of tasks.

Overall we argue that positioning in the zones we identified constitutes part of a role claiming act and the analysis of the verbal data supports this claim as shown below. In our work we are particularly interested in discursive strategies for interactional control and we discuss below the use of questions in our data.

Typology of questions

The analysis of the control claiming discursive strategies in our data has resulted in the typology shown in Table 2. This typology is based on the questions’ pragmatic function: members’ questions have been studied from the perspective of the messages they intend to convey in this particular context as perceived by the analyst (Author 1) and members of our team (Authors 2 and 6).

<table>
<thead>
<tr>
<th>Pragmatic function</th>
<th>Usually raised by</th>
<th>Question type</th>
<th>Examples</th>
<th>Linguistic features</th>
<th>Multimodal accomplishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosing/assessing the situation</td>
<td>Senior doctors</td>
<td>wh- questions</td>
<td>What’s going on?</td>
<td>Lack of personal pronouns, leaving intentionally the floor open</td>
<td>Transitioning in the central zone (left or right bedside) upon entry to the delivery suite</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>What’s happening?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allocating tasks &amp; turns/ setting the topical agenda</td>
<td>Senior doctors</td>
<td>polar questions (yes-no), indirect questions</td>
<td>Can you give me the box? If you could start drawing up the infusion?</td>
<td>Selection of the next speakers using you or proper names or targeting the recipient multimodally</td>
<td>Use of appropriate gestures, body &amp; gaze orientation and movement for person deixis Setting the topical agenda: Transition to other material zones + questions</td>
</tr>
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</tr>
<tr>
<td>Seeking confirmation</td>
<td>Senior doctors</td>
<td>questions in declarative syntax, elliptical questions, rhetorical questions</td>
<td>Baby’s fine?↑ We have the baby?↑</td>
<td>Rising intonation (↑)</td>
<td>Appropriate gaze &amp; body orientation to indicate the next speaker</td>
</tr>
<tr>
<td>Requesting information</td>
<td>Senior doctors, Junior doctors, senior midwives</td>
<td>wh- questions</td>
<td>What pain relief have we got? What’s the blood pressure?</td>
<td>Use of the collective pronoun we to establish a shared identity or lack of personal pronouns</td>
<td>Lack of multimodal behaviours that target someone in specific, leaving the floor intentionally open</td>
</tr>
<tr>
<td>Seeking advice/ clarification</td>
<td>Junior midwives</td>
<td>wh- questions, how questions</td>
<td>Where shall I put it? How do I do it?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 2, although all members draw on the same discursive strategy, namely questions, different types of questions are raised by different professional roles and are achieved in various multimodal
ways. Our findings indicate that senior doctors use questions in order to control the situation, allocating tasks and turns and setting the topical agenda. This is in agreement with previous literature that has discussed questions as mechanisms of interactional control (e.g. Aritz et al 2017; Halvorsen 2018) and as effective means of managing the agenda (Holmes & Chiles 2010).

However, the emergent typology also suggests that there are also two other types of questions raised primarily by senior doctors; questions aiming to diagnose the situation and questions seeking confirmation. These types of questions legitimise and reinforce senior doctors’ power; by asking questions to diagnose the situation upon entry to the delivery suite, senior doctors (attempt to) claim control of the event early in the episode. Similarly, the data show that senior doctors are the only members seeking confirmation which reveals a different level of knowledge among the professional roles; by seeking confirmation, senior doctors exhibit a straightforward knowing stance. If we compare this to the junior midwives, at the other end of the hierarchy spectrum, by seeking advice/ clarification they seem to exhibit a clear not knowing stance. This difference between a question which is information-seeking and one which is confirmation-seeking in relation to the attached level of knowledge is also discussed in Haworth (2006). In a context where ‘knowledge’ has direct effect on the clinical outcome, role claiming acts are significant for responsibility negotiation. We illustrate those arguments in the data that follow.

We draw on three episodes and show how the discursive strategies are mobilised by team members and their interrelation with teams’ clinical performance.

**Senior doctor’s leadership in a team with good clinical performance**

The excerpt provided below is from Case 3, where the team scores high in the clinical performance ranking scheme (administration of magnesium within 5-6 minutes), and is illustrative of the ways leadership is enacted in our data set by senior doctors.

Excerpt 1.
1 JM1: this is Lucy first stage term plus four and
2    she (took) oxygen she has ehm: spontaneous
3    labour-
4 SD: -get the oxygen get an airway

5 JM1: yeah [okay
6 SM1:     [let's get her an airway (indec)

7 SD:     we have the baby?↑
8 JM1: (no) she's into spontaneous labour so
9    [(indec)
10 SD: okay

11 SD: get me the airway there
12 JM1: [ye:ah
13 SD: that’s fine
14 JM1: [(indec) and: contracting [4 to 5
15 SD:          [okay fine
16 SM1:       [I'm just checking
17    her pulse-
18 SD: -and what's the blood pressure?

In line 4 the senior doctor interrupts junior midwife 1 who updates the team, taking over the floor with an unmitigated directive: get the oxygen get an airway. This interruption prevents the junior midwife from completing her turn and is used by the senior doctor for the introduction of a new topic, which is a task allocation. Interruptions have been widely analysed from a CA perspective as speakers’ means to
demonstrate power, dominance and control. The oxygen administration task is critical in this context, as it is one of the three main tasks to be performed in eclampsia emergencies. The other two are the intravenous (IV) access task and the magnesium preparation and administration task. The significance of the oxygen-related task is linguistically indexed by the senior doctor with the paraphrase of the directive (*get the oxygen get an airway*) and the repetition of the verb *get*. Repetition is a useful strategy for intensifying directives (Holmes & Stubbe 2015). The senior doctor uses the canonical form of a directive (imperative) which has been identified by Holmes & Stubbe (2015) as the most frequent type of directives used from superiors to subordinates.

The senior doctor’s dominance is acknowledged by all the present members in the following ways: the junior midwife does not attempt to complete her utterance. Her subsequent action, in line 5, is a responsive action, aligning with senior doctor’s contribution. This alignment is indicated by the use of two response markers (*yeah okay*) and the instant orientation of junior midwife’s body to the equipment table, in order to get the airway. Senior midwife 1 also shows agreement with the senior doctor by echoing him in line 6: *let’s get her an airway.*

In line 7 the senior doctor reclaims the floor with a question which is syntactically shaped as declarative with a rising intonation, seeking confirmation (*we have the baby?*↑). The senior doctor multimodally controls the floor; he selects junior midwife 1 as the next speaker by transitioning from the left bedside to the foot of the bed in order to be closer to her while at the same time he directly looks at her. The senior doctor’s transitioning and body and gaze orientation succeed in opening the floor to the junior midwife, as in the next turn, she is the only one responding (line 8). Team members in our data consistently use gaze direction as a tool for the indication of the next floor holder. This is in agreement with previous research which has discussed gazing as a means of floor management and control (Chen, Harper, Franklin, Rose, Kimbara, Huang, & Quek 2006; Mondada 2013b).

In lines 9-10 the senior doctor briefly overlaps with the junior midwife and then gains the floor, repeating the directive of the previous instance (*get me the airway*), again in its direct and explicit form, and allocating

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3 This is not to suggest that all instances of overlapping talk are instances of power claiming (for a discussion see Angouri and Locher 2012).
the task. This time, the senior doctor also accompanies his utterance with a gesture that defines the spatial deixis of *there*, addressing the junior midwife with verbal and gestural resources and moving back to the left bedside. With this transition and the gesture, the senior doctor coordinates talk with body movements in order to create interactionally shared space with respect to the projected activity (Mondada 2009). Once again, the junior midwife acknowledges senior doctor’s dominance, as she immediately performs the task while using affirmation in line 12; a prolonged *ye:ah* which marks agreement. Junior midwife 1 then updates the senior doctor, who uses, in line 15, two acknowledgment tokens (*okay fine*) in order to reclaim the floor and denote his attention (see Redeker 2006 for discourse markers as attentional cues). In lines 16-17, senior midwife 1 also overlaps with the junior midwife and the senior doctor, with her turn aiming to introduce a new topic (*I’m just checking her pulse*). However, the senior doctor holds tight control of the floor. He manages the topical agenda by interrupting, in line 18, the senior midwife and raising a question which introduces, again, a new topic. The question here (*and what’s the blood pressure?*) aims to request information, hence leaving intentionally the floor open. This *and*-prefaced turn retrospectively ties the turn to the previous one and to the ongoing activity (Heritage & Sorjonen 1994).

This short excerpt illustrates common, in our data, discursive strategies mobilised by senior doctors in order to demarcate their zone of expertise. We have shown that the senior doctor manages the interactional floor with directives (lines 4, 11) and questions (seeking confirmation in line 7, introducing a new topic in line 18). In doing so, he maintains a central position close to the patient, at the left bedside, which allows him to control the situation. These discursive strategies are achieved in a multimodal way, as he uses body and gaze direction and body movement to indicate the next possible turn-taker or the recipient of a task. The senior doctor constructs a confident persona in this episode (see unmitigated directives, interruptions, position at a central material zone) and the strategies he employs are successful, with the targeted team members aligning with him and immediately corresponding to his requests. There is no evidence of interactional trouble. This confirms our earlier findings (e.g. Bristowe et al 2012) on how panic and noise are threatening factors for effective teamwork.

Although senior doctors institutionally have the ultimate responsibility of the event and usually *do be* the leader as described above, they sometimes resist responsibility discursively, as shown in the next section.
Lack of leadership in a team with poor clinical performance

We discuss in this section two excerpts from Case 8, in which the team has scored low in terms of their clinical performance; the magnesium has been obtained but not drawn. We illustrate how the senior doctor fails to mobilise the identified discursive strategies in order to enact leadership.

Excerpt 2.

1 SM1: she just had a fit (. ) e:h the blood pressure
2 was (. ) what was that one†
3 JD: ten over fifty
4 SM1: no no much higher (. ) what did they say
5 one sixty [one
6 SD: [right (. ) sorry who am I?
7 (3.0) ((midwives seem confused, looking to each
8 other))
9 SD: who am I today?
10 SM1: you're mr. NAME
11 SD: that's all[right
12 SM1: [yeah? ((laughs))
13 ((lines 13-17 are ommitted))
18 ((SD moves away from the bed))
19 SD: right (. ) so remind me that again (. )
20 so she's (. )
21 ((3.0 multiple overlaps, both SM1 & JD point
22 to somewhere))

The senior doctor enters the room quite late and positions self at the right bedside. Instead of the, typical in our data, diagnostic question which provides control of the situation, he remains silent in lines 1-5, not coordinating the team members who struggle to update him. See, for example, junior doctor’s and senior midwife’s disagreement over the blood pressure in lines 3-4, which is not resolved. In line 6, the senior doctor interrupts during the critical stage of handover to make a joke relevant to the simulated nature of the drill: who am I?. The humourous turn is abrupt and not acknowledged as such by the rest of the team.
members. The long three-second pause and the indexing of confusion, e.g. team looking at each other, are good signs of the need for interactional troubleshooting. In the next turn, the senior doctor self-repairs, repeating the question and adding, this time, the temporal specifier: *who am I today?* (line 9). This works and senior midwife 1 responds, in line 10, without progressing with the medical task.

A few lines later, in instance 2, the senior doctor moves away from the right bedside to the corner of the bed, a dispreferred locus, and stays there for the whole episode. This goes against the tendency of senior doctors to orient themselves towards a central action zone, usually the bedsides. The senior doctor’s utterance in line 3 is a good illustration of the mitigation documented in the whole episode. The senior doctor attempts to claim the floor in lines 19-20 (*right (.) so remind me that again (.) so she's (.)*) but his turn is prefaced by a discourse marker (*right*) and contains the following sequence of pauses and dispreferred linguistic cues: pause; discourse marker *so* to indicate a change of subject; interactionally dispreferred introduction (*remind me that*) (Antaki 2011); pause; repetition of the discourse marker *so*; pause. This string of discourse markers, pauses and the introductory fragment *remind me that again* accompanied by a movement outside the central bed zone result in senior doctor’s interruption by other team members who overlap with each other for three seconds. The uncertainty manifested in senior doctor’s utterance results in interactional trouble (three seconds overlaps, simultaneous gestures by junior doctor and the senior midwife), and it ‘filters through’ the whole team. This is in agreement with Bristowe et al. (2012), who discuss certain leader ideals, including the importance of senior doctor being calm and confident. In this episode, these ideals are not met, as the senior doctor does not seem confident, and this causes interactional problems to the whole team. An analysis of the use of questions further supports this claim.

Excerpt 3.

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4 As this is a simulated scenario, one could argue that the participants engaged more or less with the task. This criticism to role plays and simulations has been vividly debated (see e.g., Siassakos et al 2011; Stokoe 2013) and a discussion goes beyond the scope of our paper. These simulated exercises are part of the ‘normal’ staff training and not carried out for the sake of linguistic research and also given the clear patterns that emerge in the corpus, we do not consider the simulated nature a limitation.
The questions marked in bold in lines 1, 6 and 14-15 are indicative of the questions raised by the senior doctor in this particular episode. The senior doctor’s range of questions here is quite limited to requesting information even at later stages of the episode and questions are repeated, as happens in lines 6 and 14-15. The senior doctor does not issue directives and does not raise the expected types of questions in order to control the situation. For instance, questions aiming to allocate tasks are almost completely absent in the whole episode. In the excerpt above, senior doctor’s questions (lines 6 and 14-15) exhibit a not knowing stance and junior doctor’s answers (lines 7, 16) a knowing stance, indexing senior doctor’s resistance of responsibility. The senior doctor’s practice of distancing and resistance of responsibility is manifested both spatially, as he acts in a rather marginal spatial zone, at the bed corner, and verbally; in lines 14-15, for instance, there is mitigation manifested in the repetition of the question which has already been answered in line 7 and the brief pause contained in the question.

Overall the senior doctor exhibits a not knowing stance and resists responsibility: he does not act in the main material zone of senior doctors, he does not issue directives, and he raises questions which mainly aim to request information. The senior doctor also seems to struggle in allocating tasks and turns and exhibits
mitigation in the whole episode, failing to control the interactional floor. The lack of leadership and the non-performance of the discursive strategies we identified impact on the whole team and could be relevant to the team’s poor clinical performance. This confirms Sarangi & Clarke (2002), who argue that ‘there is the need for a demarcation of the specialist’s territory and its distinction from the territories of other medical specialists’ (2002:118), something which is not achieved in this episode.

In the case above, the uptake of the junior doctor, who, in lines 7 and 16, positions self in a knowing stance, in contrast to the senior doctor’s not knowing stance is significant. It clearly shows the negotiated and distributed characteristics of leadership even in contexts where clear hierarchies are institutionally imposed (Mesinioti et al, in prep.). This divergence between epistemic status and epistemic stance is discussed further below.

Leadership enacted by other roles in a team with good clinical performance

In the medical context we investigate the senior doctors are at the top of the institutional hierarchy. However, this does not entail that senior doctors are the only possible leaders in this setting. In our data, we find instances where other professional roles -mainly junior doctors and senior midwives- also negotiate their epistemic stance and enact leadership, by stepping into senior doctors’ material zone and controlling the floor with directives and questions. Angouri (2018:150) argues that ‘negotiating the boundaries of professional roles is evidently critical in any workplace’. As an illustration, we draw on Case 5, where the team scores high in the clinical assessment (magnesium administered within 5-6 minutes). Although the senior doctor does not enact leadership in the normative way we have shown, as has happened also in Case 8, in this episode leadership work is compensated by other professional roles.

Excerpt 4.
In lines 2-3, the senior doctor raises a question in a declarative form about the blood pressure; *her blood pressure was*. Junior midwife 1 responds, in lines 4-5, and the senior doctor provides an acknowledgment token in line 6 (*okay*). In doing so, he briefly overlaps with the junior doctor and quickly quits his turn, acknowledging the junior doctor’s right to talk and not attempting to hold the floor with another question or directive. The junior doctor wins the floor in this overlap and raises a question to the patient in lines 7-8, behaviour typical of senior doctors in our data. Junior doctors’ patterns exhibit great variability, ranging from quite inactive and silent junior doctors to more active. In this particular episode, the junior doctor is quite active; this could be relevant to the fact that the senior doctor is not, and the team has to find ways to compensate for this lack of senior doctor’s initiative. The variability exhibited by junior doctors could be related to the fact that junior doctors do not have fixed responsibilities; hence they are more flexible in the ways they perform their role (Mesinioti et al, in prep.).

In instance 2, the senior doctor’s turn (line 9) does not result in an assessment of the situation as is the canonical structure in our context. The pause (*and (.) we’ve got an IV in*) and the lack of embodied cues (e.g., gaze or posture) that would open the floor to the next turn taker indicate the break of the interactional flow. The four second overlap in line 10 indicates that the floor management is unsuccessful, until the junior
doctor manages to claim the floor and updates the team, in line 11. This instance further confirms our stance of medical leadership as embodied, spatiomaterial practice and shows that the lack of relevant strategies has a negative impact on the floor management and overall outcomes. This is in agreement with previous research that has underlined the crucial role of multimodal cues (Chen et al. 2006, Mondada 2013b).

The power negotiation between the senior and the junior doctor is noticeable in instance 3, too. The senior doctor attempts to reclaim the floor in line 13 but the discourse marker *okay* at the beginning of his utterance followed by a long pause and the mitigating particle *so* delay him. This allows again junior doctor to take over the floor, interrupting senior doctor and exhibiting, in this way, situated power. Once again, the senior doctor quickly quits his turn, accepting junior doctor’s turn (line 14). In both instances 2 and 3 the senior doctor struggles to manage the floor (failing to select the next speaker in instance 2 and to introduce the next topic in instance 3), and it is the junior doctor who steps into the leader’s role and employs the relevant discursive strategies to claim control of the situation, demarcating the senior role’s zone of expertise.

The patterns shown in excerpt 4 are consistent across the whole episode; the junior doctor interrupts the senior doctor and takes over the floor particularly after senior doctor’s long pauses and mitigation markers. The junior doctor here also negotiates his epistemic stance spatially; he acts in a very central material zone, at the left bedside, maintaining a position closer to the patient than that of senior doctor’s. In doing so, he discursively accomplishes the delineation of a zone of expertise which is usually attributed to the senior doctor. Multiple readings are possible and have been debated by the team (Authors 2, 3, 5 and 6). The senior doctor may well be relying or intending to allow the junior doctor to manage the episode. What is relevant to the discussion here is that the senior doctor’s untypical leadership behaviour is compensated by the rest of the team, showing how medical leadership goes beyond institutionally predetermined roles. This becomes clearer if we consider the use of directives and questions by other professional roles in the episode. In excerpt 5, for instance, it is junior midwife 2, senior midwife 1 and the junior doctor who attempt to coordinate action, co-constructing the role of the situated leader.

Excerpt 5.
In line 1, the senior doctor provides an acknowledgment token (okay) which is not followed by a question or a directive, leaving the floor open to everyone in the setting. This results in long overlaps (3 seconds) and a pause, until junior midwife 2 claims the floor with a question aiming to issue a directive (lines 4-5). The question about the blood pressure reading is canonically raised by senior doctors in our data set. The collaborative action in this episode shows the team’s role in doing team leadership prompted by the senior doctor’s behaviour. This is also exhibited spatially; in instances 1-2 the senior doctor moves from the right bedside to the equipment trolley and back, but this transition is not justified (it does not sign a task allocation, a task performance etc.), and then he positions self in a rather marginal spatial zone, away from the bed and the equipment table. This distancing of the epicentre of action also distances him from claiming responsibility for the immediate work – note though that the responsibility still relies with him for medicolegal purposes.

In lines 6-7, the junior doctor (not visible, standing by the equipment table) also raises a question which introduces a new topic directly relevant to one of the three main tasks the team needs to perform; the IV access task. The senior doctor seems confused, which is indexed by turning the head right and left and simultaneously echoing the junior doctor: IV ranitidine? The uptake indicates that this is perceived as
uncertainty by the team. In lines 9-10, the senior midwife 1 takes over the floor and exhibits a multimodal behaviour similar to that of a typical senior doctor; she issues a directive to junior midwife 1, targeting her as the recipient of the directive by turning her torso and looking directly at her. In doing so, she compensates for senior doctor’s hesitance, bringing in the ideal of ‘being confident’, described in Bristowe et al. (2012:1386) as ‘somebody that could direct people to what they wanted them to do’. In lines 9-12 senior midwife 1 overlaps with the senior doctor; this overlap is turn-competitive and is received as such, as none of them quits their turn. The senior midwife reclaims the floor and completes her utterance in lines 15-17, issuing a directive. In doing so, she uses a less forceful form of directives with the use of a modal declarative: *you can go into* (Vine 2009). Her multimodal indication of the directive’s recipient succeeds, as in line 18 junior midwife 1 responds in the affirmative (*OK*), acknowledging authority. The senior doctor’s mitigation, which could be the reason why directives are issued by other team members, is also noticeable in lines 11-14: his utterance contains two pauses and a repetition (*we should have it (.) we should have it really (.)*) before managing to state their need, which is *but*-prefaced (*but we need the anaesthetist*). The senior doctor’s embodied behaviour –movements back and forth, *I don’t know* hand gesture in instance 3– indexes lack of control. The significance of breaking expectations of performances in clinical leadership is further discussed in the next and last section of the paper.

**Concluding remarks**

The professionals in our data draw on all available resources in order to carry their work and to do so they negotiate their epistemic stance and role/responsibility that is associated and expected in their context. Seniority in the medical emergencies we studied is claimed, projected and resisted by positioning the body in a central zone, typically the senior doctors’ material zone, and by managing the floor –the use of directives and the taxonomy of questions illustrate this. We used a taxonomy of questions which confirms/expands previous studies (Holmes & Chiles 2010; Aritz et al 2017). Our data also show the relationship between seniority, expertise and leadership in the medical emergency context. Although not all senior positions are positions of leadership, the role of the senior doctor goes with institutionally formalised expectations of providing directions, training to junior members and taking medicolegal responsibility of the
team’s outcomes. By managing the interactional floor our medical professionals manage control over the clinical outcomes of the team.

Our findings also confirm the dynamic nature of leadership and are in agreement with Mondada (2013a), who argues that, although participants tend to achieve consistency between epistemic status and epistemic stance, non-congruent actions are possible. The role of the team in ‘filling in’ the gaps left when senior doctors fail to take on the expected material/interactional position is important for future research to address further. On this, we found the concept of zones of expertise useful in bringing together the negotiation of role responsibility in the material zones interactants claim as well as in their linguistic behaviour. Although we specifically focused on questions and directives here, there is scope for looking into how power is communicated through a wider range of interactional features, such as interruptions and linguistic elements of praise. We have also shown the critical role of spatial zones which expands work on multimodal floor management. We discuss this further elsewhere (Mesinioti et al, in prep.). We have already shown however that different professional roles overlap with each other in the material zones of the emergency room, but they make different use of them. Senior doctors control the centre of the room and senior midwives act at the equipment table, at one of the two bedsides and exit the room frequently, but less frequently than junior midwives. Junior midwives exhibit a clear tendency to stay close to the equipment table and are the ones who exit the room most frequently in order to retrieve things, while one of them maintains a bedside role, passing crucial information to the team. The different use of the zones and the embodied work the professionals do compensates for the overlaps in the zones.

Zooming in on turn-taking practices, recent CA work (Schmitt 2005; Mondada 2013b) has argued that interactants draw on a range of spatial and embodied resources, such as pointing, gesturing, turning toward, back and away, body torque, and gaze. Well put by Mondada (2013b:48), the participants ‘orient to the fact that their selection is related both to the organization of the current turn and to the spatial position and attention of the [chairman] ((leading interactant))’. This is also shown in our data where the verbal and non verbal behaviour are aligned. Although we did not explicitly focused on gesture or gaze per se, further work on the relationship between verbal and non verbal resources in medical leadership is needed to advance our understanding of the interactional context of the emergency room.
To conclude, our study consistently shows that ‘good’ medical performance is related to the interactional performance of the team. This general principle is by no means news to the socio/linguistic community; it is however still not widely accepted in medical literature where communication is often separated from team work. At the same time the importance of the material space of the emergency room has been understudied by sociolinguists and particularly workplace sociolinguists. Our field has, for a long time, prioritised verbal interaction abstracting it from its embodied, spatiomaterial context. This has served the field well and provided us with important insights on how teams work and interaction is organised. The time is ripe however for multidisciplinary studies that combine linguistic analysis with a holistic view of medical and spatiomaterial performance.
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