Methods for Studying Migrant Doctors' Transition to a New Language

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The demand for specialist physicians in Sweden far exceeds the supply. In the coming years, the supply of specialist physicians will depend on the continued migration of doctors trained in other countries, according to the Swedish National Board of Health (Socialstyrelsen 2015). In an increasingly globalised world, people are more closely connected to one another as well as more mobile. Greater mobility, especially in the labour market, has made language skills a resource that is also attractive in commercial terms (Blommaert 2010), which among other things can be reflected in advertising for profession-specific language training.

In an ongoing research project[1], we have followed a group of doctors in the process of establishing themselves in Sweden. They were employed through a company commissioned by the county council to recruit doctors from different EU countries and which is responsible for their Swedish language training. An intensive Swedish course is conducted at a campus in Poland for about three months. No prior knowledge of Swedish is required for doctors from EU countries in order to get a Swedish medical licence. However, most county councils require these doctors to pass language tests to be hired. The company guarantees that the doctors will have reached Level B1 after their intensive training in Poland and Level B2 after an estimated three-month stay in Sweden.[2]

The overarching aim of our project is to investigate the doctors' development of interactional competence needed to function as a doctor in a Swedish healthcare setting. We are interested in how professional linguistic skills are recontextualised in a new country and want to explore the meaning of change of workplace and how different resources are used in the process. In order to examine this process, data from different settings before and after the doctors' migration to Sweden is necessary. In this paper, we discuss some methodo-

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[1] The project, 'Abroad-recruited physicians' education on medical Swedish in Poland', is funded by *The Foundation for Baltic and East European Studies*.

[2] The Common European Framework of Reference for Languages (CEFR) describes foreign language proficiency at six levels: A1–C2.

logical issues about different types of data, and the possibilities they provide to examine the doctors' transition to a new professional language. We have a range of data (interviews, focus group discussions, roleplays and real occurring interactions), and with examples of results from completed or ongoing sub-studies we want to identify and analyse some of the strengths and limitations related to these different types of data.

Theoretical background

Several factors interact when professional skills are to be transferred from one country to another, in this case Sweden. Below we describe some factors that we consider to be central in this process. Our theoretical approach is based on the view that language resources concern different kinds of competence at many different levels and create a complex linguistic repertoire in an individual. These resources may consist of concrete accents, styles, genres and different modes of conversational arrangements. The linguistic repertoire of multilingual individuals consists of resources acquired from different language contexts (cf. Blommaert 2010). For the doctors in our study, we assume that their experiences of using their first language in some discourse practices are resources that are partly transferrable to a new healthcare context. The doctors' professional knowledge, which is partly conveyed through language (to what degree varies between different specializations), comprises medical knowledge and familiarity with what the role of doctor entails in matters such as case history, disease diagnosis and treatment. This is described by Sarangi & Roberts as *professional discourse*, that is, 'the shared ways of knowing and seeing which characterise the community of medical practitioners' (1999:480).

The research field of second language acquisition is traditionally dominated by grammatically oriented studies (Håkansson & Norrby 2010), but during the last decades there has been an increased focus on pragmatic aspects (e.g. Markee & Kasper 2004; Kasper 2000) as well as communicative competence (e.g. Larsen-Freeman & Long 2014). The concept applied in our study, *interactional competence*, is more complex and can be described as an umbrella term for pragmatic and conversational knowledge (about turn-taking, topic initiation etc.). More specifically it can be defined as an individual's ability, in interactional situations, to express and interpret communicative acts linked to the socio-cultural and psychological rules of a group (Barraja-Rohan 2011). The concept contains a number of resources and abilities that are required for successful participation in social inter-

action, and some researchers use the plural form of the term, interactional competen*cies* (Kasper 2006:86) to emphasize the multiplicity. Much of this needs to be learnt in context, but this does not preclude people who are multilingual from using a previously acquired linguistic repertoire to some extent. For adult second language learners 'interactional competencies are both resources and objects of learning' (Kasper 2006:87).

As claimed by Young (2011:430), interactional competence 'is not what a person *knows*, it is what a person *does* together with others'. The concept of interactional competence builds on previous theories of competence, but unlike the concept of communicative competence, which is recognized as a characteristic of a single individual, interactional competence is co-constructed by the participants in interactional practices (Young 2011). In line with this reasoning, the study of an individual's development of interactional competence over time assumes that the individual being studied interacts with the same person in the same type of discursive practice.

Participating in interaction obviously assumes some basic knowledge of the syntax, lexicon and phonology of the current language. An established approach is to consider language proficiency as a separate component (cf. Bachman & Palmer 1996). Another approach, proposed by Young (2011), is to consider language proficiency as resources included in the concept of interactional competence. It is possible to separate language knowledge from interactional competence (e.g. in teaching and test contexts), but linguistic resources must be included in interactional competence.

Communicative practices in the health care sector are, according to Roberts and Sarangi (2003), characterised by complexity where communicative models, strategies and styles may shift constantly, and the health worker has to take on different roles due to a constant change of conditions (Sarangi 2000). A part of the new knowledge that the migrant doctors have to acquire is awareness of socio-cultural factors such as national and local conditions concerning healthcare organisation, rules, and regulations, as well as behaviour towards patients. Knowledge about these factors is needed to understand and participate in what Sarangi & Roberts (1999) call *institutional discourse*. In addition, the doctors have to acquire knowledge on ways to handle *personal discourse* (Sarangi & Roberts 1999), which includes being able to talk about experiences from personal life-worlds, such as small talk, in accordance with socio-cultural norms and frames of reference. The demands of the doctors in our study are therefore to be able to use linguistic resources for different purposes in complex medical practices.

The ethnologists Wolanik Boström & Öhlander (2012) describe the mobility of doctors in a global labour market in terms of the Bourdieu-inspired expression *transnational medical field*. In a study of the experiences of doctors who were born in Poland and migrated to Sweden, one of the findings was that the doctors' professional competence, despite the transnationality of the profession, requires adaptation to new socio-cultural conditions at the national and local level. One organisational difference is that the division of responsibilities in the Swedish healthcare is described as being more horizontal than in Poland. Some of the doctors describe it as a move without problems from one local context to another within the medical field. Others note language problems in their daily interaction. They express frustration over the fact that their own inability to communicate in what they call 'fine' Swedish can undermine their capacity to act as a professional authority when they see patients (2012:10).

Linguistic studies of interaction between doctors and patients

Interaction between doctors and patients is a well-researched field both internationally (e.g. Heritage & Maynard 2006) and in Sweden (e.g. Melander Marttala 1995; Melander Marttala & Mattson 2017). According to Linell (2011), primary care consultations between doctors and patients are likely to be the most studied activity type, not least with techniques from conversation analysis (CA). The studies within CA have identified distinctive tasks, goals and activities in different phases of the interactions as well as communicative dilemmas in the interaction between doctors and patients (ten Have 1991; Heritage & Maynard 2006). In English-speaking countries, language proficiency as well as different cultural expectations have been identified as issues for doctors who use English as a second language in their profession. Regarding second-language speaking doctors in the Swedish-speaking area, Berbyuk Lindström (2008) presents a study using a range of methodologies to examine the communication of doctors who are second-language speakers with Swedish patients and colleagues. Specialists, such as most of the doctors in our study, face other medical activity types in various stages of the care process than the medical interview and physical examination (Linell 2011). Doctors' inter- and intra-professional interactions are not as well researched, though there are some exceptions, like Lundgren (2009), Svensson et al. (2008) and, to certain parts, Berbyuk Lindström (2008).

In medical education, roleplay is widely used as an educational method for communication training (Nestel & Tierney 2007). A study concerning the learning contexts for doctors is Thomassen (2005; 2008), who analyzes simulated consultations between medical students and real patients during medical education in Norway. According to Thomassen there are ambiguities at different levels for the participants to handle, caused partly by an uncertainty as to whether the roleplay should be perceived as authentic or as a training situation. In countries like Australia and New Zealand roleplays have been studied as ways of testing as well as training doctors with English as a second language, e.g. by Wette (2011) and Pryor & Woodward-Kron (2014).

The Swedish course in Poland

According to the recruitment company's website, the language training offered is focused on professional, medical language and typical situations encountered in this new work environment. Nonetheless, we note that the teaching at the training school in Poland consists mainly of traditional foreign language teaching, with emphasis on vocabulary and syntax. In most cases, oral exercises are based on written texts. Only about fifteen per cent of the time is spent on what is known as Medical Swedish.

Methodological approach

In order to capture the complex interaction between factors of relevance in the process when professional knowledge and experiences will be transferred to a new language, we need to use different types of data. The data collection was designed in relation to two fields: a) the education context (the Swedish course at the campus in Poland) and b) the Swedish medical field. The education context is fairly easy to grasp (certain time, certain number of participants, clearly defined purpose), whereas the health care context is a large and heterogeneous field.

Based on these conditions, we developed a model for data collection, which gradually was adapted to actual conditions in the fields. a) After having observed the learning activities at the campus during a first visit, we found them unsatisfactory for the purposes of our study and decided therefore to take a more active part. Our model is based on a combination of participant observation and staged activities that provide opportunities for doctors to speak Swedish in a professional role and reflect on their lan-

guage-learning process. b) When we studied the doctors in Sweden we used more traditional ethnographic methods, aiming to describe and understand the language use in the specific medical practices.

The result of the necessary adaption to the two fields is a mixture of different methods. In accordance with Angouri (2010), we believe that mixed methods designs can contribute to more in-depth analyses of research questions. This is an experience also drawn from a previous project about Swedish-speaking staff at another company located outside Sweden (Kahlin & Tykesson 2012). Different collection methods can also make it easier to gain trust and get access to different settings. As Angouri points out, 'some of the challenges of the workplace as a site of research [is] that [it] is notoriously difficult in terms of gaining access and collecting data' (2010:39) and some areas of research are more relevant for the practitioners than others. In Poland, our participation had to be authorized by key people on campus, and therefore we developed a design that in certain parts could be considered useful for the course and the course participants. Due to the necessary compliance in fieldwork, the research plan was gradually adjusted. It is well known that a detailed research plan cannot be followed in terms of conditions with an unpredictable and sometimes chaotic everyday reality (Blommaert & Jie 2010). In our case, the data collection had to be adapted to the course's schedule, which sometimes changed from day to day.

The choice of analytical methods is eclectic, in accordance with the tradition of ethnography of communication (Rampton et al. 2002), but mainly the methods have been taken from the field of interactional sociolinguistics. In the analysis of the roleplays and the real occurring data, we use tools of CA that are suitable for a close analysis of different aspects of interactional competence. In line with Linell & Thunqvist (2003) and researchers in the area of applied conversation analysis, e.g. Stokoe (2011), we think that CA can be used as a method to analyze simulated interaction, such as roleplays, with awareness of the type of activity being studied – despite the fact that applying the method to data other than naturally occurring social action and interaction is not in accordance with CA's basic principles (Sacks 1992).

Data collection

The first phase of data collection was carried out in Poland. We visited the campus on three occasions, ten days in total, and collected data from participants of two language courses. The visit to the first group served as a pilot study that helped us develop a data collection model during the two

visits that followed with a different group. During the first visit, we conducted interviews and observed lessons. This was also done with the second group, but during the second and third visits we took a more active part, e.g. by conducting roleplays – that is simulated medical interviews – and initiating focus group discussions.

The second phase of data collection took place in Sweden, with interviews with some of the doctors after a few months of working and living in Sweden. We also conducted a pair of case studies that consisted of observations and recordings with two of the doctors at their workplaces during a working day. The amount of data from workplaces is relatively small but can be reliably related to the large amount of previous studies of medical practices.

The major part of the data is collected through various activities we initiated (see table 1). The real-occurring data is collected during lessons in Poland and during various health care activities with patients and colleagues (see table 2). All data was audio recorded, although audio-visual technology would be preferable for our analyses. The use of audio recordings was chosen for two reasons. During the course, we wanted to have access to sensitive situations in the early stages of language learning and we did not want to disturb more than necessary. At the Swedish hospitals video recordings were excluded for legal reasons.

Table 1. Audio recorded data from research-driven activities.

Type of data	Location	Time	No. of participants	Length of recordings
Interviews, doc's	Poland	6th course week	9 (1st course)	5 h 6 min
Interviews, doc's	Poland	6th course week	7 (2nd course)	3 h 42 min
Interviews, doc's	Sweden	After 3–7 months of work	5	5 h 35 min
Interviews, teachers, organizers	Poland	6th course week	2	2 h 26 min
Focus groups	Poland	12th course week	14 (3 groups)	2 h 1 min
Argumentation exercises	Poland	12th course week	14	1 h 36 min
Roleplays	Poland	6th course week	14 (2 groups)	2 h 45 min
Roleplays	Poland	12th course week	14 (2 groups)	2 h 19 min

Table 2. Real-occurring data, documented by audio recordings and field notes.

Type of data	Location	Time	No. of participants	Documentation
Talk-in-interaction	Workplaces in Sweden	After 5 and 6 months of work	2	1 h 16 min and 2 h 1 min
Talk-in-interaction	Lessons in Poland	6th and 12th course week	23 (1st course) 14 (2nd course)	Ca 8 h (observations)

The study's interdisciplinary approach

All data collection was carried out by Kahlin and Tykesson, both applied linguists. As a way to diminish the interpretive gap between the actor and the observer-researcher, discussed by Sarangi (2007), we have made this into an interdisciplinary project, conducted in cooperation with Romanitan. She has a double role, since she is both a co-researcher and a clinical doctor (a triple role, actually, since she herself has migrated to Sweden as a doctor). Romanitan's contribution, besides being a medically informed dialogue partner during the research process, is that she created realistic cases suitable for the roleplays.

Interviews as a method

The interviews in Poland were semi-structured, lasting between 45 and 60 minutes and were conducted in Swedish. Although the Swedish course had only lasted for five weeks at that time, out of sixteen persons only one chose to speak English. The doctors were also encouraged by their teachers to participate in our interviews, as this gave them an opportunity to speak Swedish with native speakers. Both researchers participated in most of the interview occasions and the respondents were also given the chance to ask us, as residents of Sweden, things about their future homeland. Thereby, they got to know us, which made it easier for us to get their contact information for follow-up interviews. The respondents were asked questions about their background, the Swedish course, their language learning strategies, their reasons for migrating and what ideas they had about how it might be to start working in a new country. Through these initial interviews, we got 'the big picture' and were able to get a grip on their experiences of difficulties and achievements, concerning language acquisition outside of the target language environment. We noted a tendency to downplay the importance of having to change professional language. An example is the following quote, which we think captures rather well the respondent's

and her course mates' mainly positive attitude to their migration project as professionals: 'I hope I'll be the doctor that I was in Croatia, after some time I hope it'll be the same'[3] The notion of 'the same' indicates that the respondent considers her profession as essentially transnational (cf. Wolanik Boström & Öhlander 2012).

The second part of the interviews was conducted with a smaller group of doctors (five persons) at their workplaces in Sweden, or, in one case, by telephone.[4] The interviews were performed in a conversation-like manner and lasted between one and two hours. The overarching questions were: 'How has everything worked so far?', 'How is the interaction with patients and colleagues working?' and 'Do you have any specific strategies to overcome language obstacles?'

To summarize some of the findings about the doctors' experiences of difficulties and achievements at their new workplaces, the people interviewed give the impression that they all agree on the degree to which different medical practices are challenging due to shifting conditions and situations. Talking to patients appears to be fairly uncomplicated: 'It goes fine with patients, I think. Sometimes they don't understand me, so the nurse helps me.' Work-related interaction in face-to-face situations with colleagues is also reported as generally easy to handle, whereas phone conversation with colleagues and other staff is more difficult (cf. Pryor & Woodward-Kron 2014). By far the greatest communicative challenge is, according to the doctors, to take part in small talk, that is, talking about things in domains not related to medicine: 'It's easier with the patients than during coffee breaks [*fika*]. Everybody talks and I don't understand.' Berbyuk Lindström (2008) also mentions small talk as a problematic issue for second language speaking doctors at work. The plausible explanation is 'the lack of both language competence and cultural competence' (2008:115).

A particular kind of challenge is hybridity in communicative activities (cf. Sarangi & Roberts 1999). This is shown by the quotation below, about specialist meetings that include features of joking:

> Mammography conference with radiologists, surgeons, pathologists, oncologists – it feels good. We sit and show different cases. Do they need surgery or not, we talk about what to do. It goes well. I understand most

[3] All utterances of participants are given here in English translations of the Swedish originals.

[4] The telephone interview is not recorded.

> part. Sometimes they make jokes that I don't understand, but I understand what happens with patients.

When fluent in a certain language, small talk may be a moment of relaxation at work, whereas for the doctors who have just arrived in Sweden, this is the most challenging form of communication, especially when the small talk is embedded in another communicative activity.

Through the interviews, we captured some of the language learning strategies used by the doctors. One notable finding is that many of the respondents emphasized the value of having second language speaking colleagues to whom they can turn with their language issues, as well as questions about the organization culture.[5]

A great advantage of using interviews as a research method is that it provides insight into the great variety of communicative practises that doctors face at work that would otherwise be difficult for researchers to get hold of, like private situations and sensitive professional situations. In our experience, it was valuable to be able to reflect on the learning process along with the doctors, especially in the early stages of their intensive language studies. The reflections are of interest as they allow us to learn from people rather than studying people (cf. Spradley 1980). It was all facilitated by the fact that the informants have long study experience and generally a well-developed verbal capacity. However, reported data has its weaknesses. As noted by many researchers before us, it captures only what the interviewees are aware of, can express and want to tell the researcher about.

Focus group discussions as a method

The three focus group discussions, with 4–5 people, lasted for about 40 minutes each. They were held in connection with lessons (argumentation exercises) that we had been asked by the company to lead.[6] We were both present and shared the role of moderator. The participants were grouped by their specialization. This division was not our decision, but the fact that the smaller groups turned out to be fairly homogeneous, possibly increased the participants' involvement in the discussions.

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[5] For a more elaborate presentation of interview results, see Tykesson et al. (2017).

[6] As university lecturers in linguistics, we are both experienced teachers. It should be noted that the moment we switched to the focus group discussions, we carefully announced that we now acted as researchers and no longer as teachers.

Through the discussions, we got insight into the participants' way of talking about their professional knowledge, such as their views on language use in their professional roles. It also provided information on the different kinds of interactional knowledge the doctors have previously gained. As medical students, some of them had taken courses in how to talk to patients, but most of them had learned through practice, by observing how others do, as one of the psychiatrists reported: 'My mentor told me that I first had to sit next to her to see how to talk to patients. After three months we changed places. And she gave me feedback after each patient encounter'. This approach was also perceived to be the best way to learn. In connection with this, they discussed the degree to which it is possible to learn medical Swedish through studies on a campus, or if one learns best through internship, which some of them claimed. These people also expressed their frustration that, as experienced doctors, they now had to sit on the school bench all day long and study language. However, most of the participants expressed satisfaction with the intensive Swedish studies. The latter point of view was in line with what was conveyed in the interviews.

Based on their experiences as doctors, the participants jointly were able to reflect on important aspects of conversations with patients as well as ideas on what communicative challenges the work in Sweden would entail. To be capable of really listening to what the patient says, essential if you are to help the patient, was highlighted as the biggest challenge: 'I think at first it will be difficult'. In some medical areas though, listening to the patient is less crucial, since the activity is less conversational dependent than in others. A consideration expressed by a cardiologist was that the examination of patients should not be problematic. To her, informing the patient should be more difficult than the physical examination. Some challenges mentioned were related to cultural expectations. The following quotation is from a psychiatrist, who expressed concern about working in a country without the same strong narrative tradition as in his home country, Spain:

> You have to learn what is 'normal' in Sweden. What is considered normal in one country need not be considered normal in another. For instance, I like to tell stories to the patients. I think it will be difficult in another country.

The focus group discussions took place after the second roleplay sessions, and some of the topics that had been raised during the moments of reflection after the roleplays were reopened for further discussion. Not least, this was the case with subjective perceptions, such as cultural differences in

the positioning of doctors: 'In my country [Romania], old doctors have God complex, the doctor is God', followed by a statement from a participant with other experiences: 'In Greece, the attitudes toward doctors are more democratic, as they appear to be in Sweden'. The perception of a more egalitarian Swedish health care was widespread among the participants (cf. Wolanik Boström & Öhlander 2012; Berbyuk Lindström 2008). They also expressed confidence that the Swedish nurses, who can be expected to be well-educated, would probably also help them with the language.

An advantage of using focus group discussions as a research method is that it generates questions other than those addressed in interviews. Thus, aspects that would be less accessible without the interaction of the group can emerge (cf. Davies 2008). What is being discussed also tends to be more universal than in individual interviews. Another advantage, which has been pointed out by researchers like Kitzinger (1995), is the possibility to get access to group norms and what is considered common knowledge in the group. Given that the participants come from different parts of Europe, it is worth considering that they orient towards a common professional discourse, which can be seen as a sign of the transnationality of the medical field (Wolanik Boström & Öhlander 2012).

Roleplaying as a method

The main reason why we organized roleplays was to get access to material in which we could investigate the doctors' development of interactional competence, an ability that has to be displayed in dialogue. We also wanted to offer an activity where the doctors could make use of their professional linguistic skills. These simulated medical interviews were performed on two occasions with the same doctors. The first time was at the 6th week of the course. At the 12th week of the course, the same cases were used for a second roleplay. In this way, we were able to make comparisons over time and examine the doctors' development during the course. As trigger material, we let them watch some films on doctor–patient interactions used for training of medical students in Sweden, which we had access to.[7] Each roleplay was about six minutes long and the rest of the group was present as spectators. Most cases were adjusted to the doctors' speciality and each person was given the same case the second time. Either Kahlin or Tykesson

[7] The teachers of the course were present while the films were shown and in discussions afterwards. None of them were present during the roleplay activity.

was acting as the patient and the other one was available to scaffold the doctors, if they asked for help. During scaffolding episodes (e.g. introducing words in Swedish), the roleplay was put on hold for a short while. Each roleplay was followed up by a short moment for reflections and questions.

Interactional competence entails, among other things, the ability to display understanding, to show engagement and empathy, and to respond to the other participants' turns in a coherent way that fits the sequence (Barraja-Rohan 2011). These aspects are central for 'active listening', an ability emphasized in communication training for doctors – 'the first step to effective communication' in patient-oriented medicine, according to Van de Poel (2013:26). Two ways to display active listening is by the use of backchanneling uttered during the current speaker's ongoing turn or by minimal responses, i.e. feedback right after the preceding turn. We can assume that the doctors have a good ability to perform active listening in their native languages and some of them, especially psychiatrists, are trained to display empathy and understanding. The question is to what extent this ability is developed in their new language.

The results show that the doctors generally use backchanneling and minimal responses already during the first roleplay and that they do not use these particular semiotic resources to a considerably larger degree during the second roleplay. This indicates that the ability to perform active listening to some extent is transferable from experiences of a similar discourse practice, medical interviews, in the mother tongue. Some of the participants seem to be able to recognize relevant positions for backchanneling even when they have problems understanding 'the patient'. Apparently, some of the participants were good at keeping a poker face during the activity. Two of the doctors (both psychiatrists) who use backchanneling frequently, afterwards reported that they did not understand much of what 'the patient' said. This is displayed in the following excerpt (Example 1), where the doctor (D) does not reveal if she understands 'the patient' (P) or not, but the backchanneling is done at relevant spots.

Example 1: (second roleplay, 12th week of the course)

P: I fall asleep [(.)eh so but so it takes a couple
D: [**mhm**
P: of hours then I wake up and then I lay there and can't go back to sleep it is not possible[(.)if I get up and
D: [**ahm**

P: drink a glass of water go to bed my husband snores[(.)
D: [**aha**

A recurring pattern for minimal responses is when a doctor is using minimal responses frequently in a third turn position right after 'the patient's' response to a question. The minimal responses are followed by a new question. These responses display very little about the doctor's understanding but can still be a significant signal of empathy. This way of displaying empathy does not require sequential timing as much as using backchanneling as a positive reinforcement for continued talk, and in a further analysis it will be interesting to compare different patterns of active listening to be able to investigate the patterns more closely.[8]

Example 2: (second roleplay, 12th week of the course)

P: it's something weird with my arm
D: **mhm** (.) what do you mean?
P: yea yea I cannot explain it but eh it- it like it- has become numb eh
D: **mhm** when e:h did it start?

A crucial reason for the setup of the roleplays was to offer a situation that enables us to study how professional experience interacts with language learning. Similar to the following excerpt (Example 3), the doctors often know what they want to say from a professional point of view, but sometimes they lack the linguistic ability to express it. One instance where some of the doctors have difficulties expressing a well-known communicative act in the medical interview is when they ask 'the patients' if they have any additional health problems to consider. The question *are you healthy?* (Example 3) seems a bit odd in the situational context, where 'the patient' has just described various symptoms of illness. The doctor is searching for words and has problems formulating the question appropriately. After the response from 'the patient', the doctor is able to reformulate the question in a more adequate way (*do you have any other diseases?*).

[8] The analysis of the roleplays is part of an ongoing study by Tykesson et al. (manuscript under review).

Example 3: (first roleplay, 6th week of the course)

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D:          eh (a:nd) eh are you healthy?
P:          before this I was healthy[a:: a::
D:                                   [befo- do you have any
            other diseases?
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One of the most important advantages of the roleplays was the opportunity for us to take control over variables, such as time and type of activity, to make it possible to make comparisons between similar interactions over time. Thus, with the longitudinal design we are able to examine language development. Within socio-cultural approaches of situated interactions, it is controversial to draw conclusions about development from one situation to another, and some critical discussion has been raised against close examination of interaction to study language learning (cf. He 2004; Rampton et al. 2002). Others argue that it is a valuable method for language learning if the data is collected before and after the actual point of learning (Melander & Sahlström 2011) but argue that it requires a longitudinal design (Nguyen & Kasper 2009).

In the analysis of the roleplays, we have made some quantitative comparisons at the lexical level between the two occasions. The pace of conversation is the measure that gives the highest impact. Everyone manages to say more words per minute in roleplay 2, an increase of eleven words per minute on average. The amount of talk is another measure that gives high impact. Although the differences between the doctors are large, everybody, with one exception, uses more words totally in roleplay 2. Worth considering is that the largest increase is found among those who use the lowest number of words in roleplay 1. The majority (11/14) also uses more words on average when formulating questions to 'the patient' in roleplay 2. It should be noted, though, that the conditions differed in the sense that the doctors were familiar with their special case the second time. The participants also had the opportunity to learn from the others' example through their participation as spectators. Although quantitative analyses can be misleading in interaction studies, as the situational factors vary, clear trends like these are still of interest, not least in order to make decisions about what variables to examine further, with qualitative methods.

The roleplays offer some opportunities to explore the interaction between professional knowledge, interactional competence and language proficiency. A reasonable assumption is that an inexperienced speaker of a language is able of making use only of a smaller set of interactional re-

sources, as Young & Miller (2004) have shown in an empirical study, but it is remarkable that all the doctors managed to implement these simulated medical interviews, already at the first occasion, when they had studied Swedish only for five weeks. We believe this can be explained by the doctors' previous experiences of medical interviews. The doctors can express enough questions to keep the conversation running, using some keywords that actualize a semantic field that is familiar to them. Besides this, they can take advantage of the right to have a higher degree of control over the topics, in their role as the institutional representative. One limitation, though, is that the doctors have to rely on verbal activities, without support from artefacts or physical examinations of 'the patients'.

A methodological advantage is that the roleplay activity allows comparisons over time, as several variables were held constant (each individual interacts with the same partner on the same topic in the same type of discursive practice). More problematic is to make comparisons between the interaction in roleplays and the interaction with patients in authentic situations, where the interaction is a part of a chain of different healthcare activities. Our role as patients with fictitious diseases, of course also reduces the similarities to real doctor–patient interaction. Linell & Thunqvist argue that simulated activities like roleplaying 'involve complexities and hybridities on several planes' (2003:409) and, like Thomassen (2005), that participants' perception of what is going on may vary. This means that when analyzing the roleplays, we must be aware of that the participants have to relate to dual roles, as doctors/learners respectively patients/teachers. Overall, the doctors take rather few initiatives for language repair during the roleplays, which is worth considering, given the early stage of their language training. The relatively few repair initiatives may be explained by the simulated situation (nobody is in real danger) or by the fact that the course participants might be afraid of being judged as poor Swedish speakers if they reveal their lack of understanding.

Two case studies: interactions at workplaces

The authentic talk-in-interaction data is recorded in two different medical settings in Sweden, a department of cardiology and a department of radiology. The two doctors we studied during different work-related tasks are both experienced specialists. At the time for the observations and recordings, the cardiologist had worked in Sweden for 5 months and the radiologist for 6 months. We divided the data collection between us so that only

one researcher was present at each workplace. Although we regard it as most valuable, the recorded authentic talk-in-interaction data occupies a relatively small part in our study. The main reason is that it was difficult to get access. Some of the doctors who were asked to participate declined to let us record them while working. In our experience, the doctors need to have strong self-confidence to let themselves be studied after a short time in a new country and at a new workplace.

There are many benefits of the study of naturally occurring talk-in-interaction.

With the recordings from different working activities we can examine how the doctors manage social actions through talk, which relies on interactional competence in relation to the actions of colleagues and patients. One finding concerns the doctors' strategies used when their linguistic resources are not sufficient. The recordings from the workplaces give evidence of the importance of repair work when the doctor does not understand a colleague or patient, in comparison to the roleplays, where, as stated, relatively few repair initiatives were taken by the doctors. Example 4 illustrates an interaction between the cardiologist and a nurse. They are in an office and prepare themselves by going through medical and social information about every patient, before they encounter the patients during the ward round. The example illustrates the professional discourse with specialized knowledge about heart rate etc. The interaction is performed in relation to graphic curves on a screen.

Example 4: Nurse (N) – doctor (D) interaction during a ward round, in the office. The patient is not present.

```
N:   she's still going quickly between hundred fifteen and
     hundred thirty hundred forty
D:   mhm
N:   is quite confused (.) dementia warning one can say
     On [her
D       [what?
N:   a little dementia (.) ☺possibly☺
```

In the third turn the nurse issues a priming remark on the patient's mental condition in a rather casual manner (*dementia warning one can say on her*).[9] This leads to a repair initiative from the doctor, where the most relevant

[9] In Swedish: *demensvarning kan man väl säja på henne.*

information is repeated in a downplaying way (*a little dementia* followed by *possibly,* which is said with laughing voice). The patient is not treated for dementia at this department and the information is given in an inexplicit way and marked as an eventuality. After the repair, the interaction about the patient's heart rate continues.

In another sequence (Example 5), at a patient's bedside during the ward round, the doctor asks the same nurse for help when she does not understand a word used by a patient. In this sequence the doctor makes use of some resources simultaneously to understand the expression of an unfamiliar word, *melange*[10]. She asks the nurse at the same time as she looks at the patient's thigh.

Example 5. The doctor (D) and the nurse (N) are standing next to the bed of the patient (P)

```
P:   speaking of the legs I'm melange on the thigh like
     I've never seen before (.)
D:   mhm
P:   is it something with oxygenation or is it- and it was
     before I came here so star-
D:   that you have problems (.) melange? ((to the nurse))
     we'll take a look
N:   motley ((the patient pulls down her pants and the
     doctor looks at the thigh))
```

In both of these excerpts we can see how the nurse and doctor co-construct their talk to fulfil the relevant medical tasks. We can examine the use of practice-specific linguistic expressions in interaction with nonverbal actions and artefacts. This interaction is possible to study only in the natural setting with all the relevant resources and actual consequences in case the doctors do not fully understand the other part.

Through the ethnographic fieldwork we got insights into what two different specialized environments actually can require in terms of linguistic resources. The fieldwork highlights the differences between various medical settings. The discursive practice of a radiologist in front of a screen is fundamentally different from the interaction beside a patient's bed during ward round.

[10] In Swedish: *melerad*.

Ethnographic observations of workplaces give us the opportunity to study what the doctors actually do at work. Blommaert (2010) emphasizes that people are generally unaware of their routines and habits, and, as Angouri (2014:6) claims, ethnographically informed case study research increases 'our understanding of the challenges employees face routinely at work'. This is true, not least for second language speakers at work and we find it fruitful to be able to study some of the doctors in their authentic setting after a relatively short time in Sweden.[11]

Concluding remarks

Our experience of combining different types of data is that it is a prerequisite for capturing complex research issues. We agree with Davies (2008) when she points out that different methods of data gathering will produce varied results and may contribute to a more complete and valid analysis. For us, this means that we can achieve a deeper understanding of how different types of resources are used in the transition to a new professional language of migrant doctors. Below we will reflect on how the different types of data in our model have contributed to the analysis.

Since we are interested in the interaction between professional experience and situated interaction, we cannot rely on established test methods with high generalizability, although some of the data allows us to make comparisons between two similar situations. A series of tests, e.g. of word comprehension, would have given us some knowledge of the linguistic progression but very limited opportunities to investigate the doctors' ability to apply the knowledge in situated interaction. Whereas the available authentic talk-in-interaction data allows us to get hold on strategic use of resources at different levels but limited possibilities to make generalizations to other settings. What characterizes analyses of such data, according to Rampton et al. (2002), is the particularity of the interpretations you can make as a researcher. The meaning of the doctors' actions at the hospitals can only be interpreted in their natural context.

We regard our real occurring talk-in-interaction data as most valuable, although it is time-consuming for the researcher, and, in this case, hard to get access to. One of the benefits of real situations compared to constructed, is that we can study how the language use is intertwined with other resources and ways to communicate when the doctors accomplish tasks in

[11] The analysis of these two case studies is part of an ongoing study.

medical practice. The recordings from the workplaces are useful to reveal the mechanisms through which the doctors constitute the specific medical encounters in their specialized settings. It gives some insights into what different specialized work situations actually can require by doctors as newly arrived second language speakers. In interaction with real patients and colleagues, doctors are also more motivated to mobilize all their resources.

The elicited data in the form of roleplaying offer some opportunities to investigate the doctors' development of interactional competence in a new professional language. The opportunity to plan the activity makes it possible make comparisons over time. The longitudinal design enables analysis of the learning process and sheds light on some of the resources the doctors bring with them from previous experiences. One example is the doctor's ability to perform active listening. It supports the assumption that the participants' experience of using their first language as doctors is a resource that, to a certain extent, actually can be transferred to a new language. Overall, it is striking that the doctors were able to participate so fluently in the roleplays – and that everyone managed to do it – although their basic language skills in Swedish were not so well developed, especially not at the first occasion. A reflexion is that the simulated situation limits the possibility to draw conclusions about the professional language use (included so-called Medical Swedish). One limitation is that the participants' previous experiences of doctor–patient interaction cannot be fully used, because multimodal aspects of various kind are lost.

The individual interviews along with the focus group discussions provide some insights into the participants' personal history and professional norms and values related to their social interaction as doctors. These insights, along with the knowledge gained through the involvement of our co-researcher Romanitan, increased our understanding and provided us with greater certainty in the interpretation of the talk-in-interaction data. A full understanding of interactional competence requires, according to Young (2011:434), 'an investigation of social, institutional, political, and historical circumstances that extend beyond the horizon of particular interactions'.

As researchers doing field studies, we have experienced that you must be flexible in the process of data collection, in relation both to gradually gained knowledge and to the conditions of the studied activities. The notion that you are not always in a position to choose freely when doing field studies (cf. Angouri 2010), is particularly true in the case of commercial enterprises. The way in which the roleplays were performed would have been different if we could make decisions without any restrictions. An optimal design, above

all, would require more time with the participants. Outside this, we would have preferred to use audio-visual technology, and after each roleplay given the participating doctor the opportunity to comment on what happened during the encounter. In this way, we would gain more detailed knowledge, not only about the participant's listening comprehension, but also about what the participant really wanted to express. Moreover, repeating the procedure at the next roleplay event would give access to the participants' own reflections on their and each other's linguistic development. According to our original research plan, we would rather have made the roleplaying with a selected few. It was not in our interest that everyone was given the opportunity to act, we believed (and some of them were quite reluctant to participate the first time). But the realized design, where everyone was included, also had advantages. A comparison of many beginners in action allows a higher degree of generalizability. In retrospect, we benefit from the discovery that there was a wide spectrum between the doctors' language proficiency.

Language skills are a valuable resource and offer possibilities to move across social and spatial domains (Blommaert 2010). Swedish hospitals are primarily monolingual environments, despite the large proportion of multilingual people in the Swedish society. While some other sectors in Sweden have switched to English as working language (cf. Söderlundh 2010), for employees of the Swedish healthcare sector the working language is Swedish, almost without exception. Therefore, mastery of the Swedish language is a ticket to the Swedish labor market and what seems to be more rewarding working conditions for doctors and other healthcare professionals. Among others who immigrate to Sweden, the recruited doctors of our study constitute a privileged group because of their highly requested medical expertise and, in relation to doctors who are not EU citizens, because of the free movement of workers within EU. Along with the discussion of methodological issues in this paper, we have identified certain parts of a doctor's linguistic repertoir, such as backchanneling, repair techniques and ability to participate in small talk, which facilitates participation in medical practices in Swedish healthcare settings.

References

Angouri, Jo 2010. Quantitative or qualitative or both? Combining methods in Linguistic Research. In: Litosseliti, Lia (ed.) *Research methods in linguistics*. London: Continuum. Pp. 29–48.

Angouri, Jo 2014. Multilingualism in the workplace: Language practices in multilingual contexts. *Multilingua* 33(1–2), pp. 1–9.

Bachman, Lyle F. & Palmer, Adrian S. 1996. *Language testing in practice*. Oxford: Oxford University Press.

Barraja-Rohan, Anne-Marie 2011. Using conversation analysis in the second language classroom to teach interactional competence. *Language Teaching Research Journal* 15 (4), pp. 479–507.

Berbyuk Lindström, Nataliya 2008. *Intercultural communication in health care: non-Swedish physicians in Sweden*. Gothenburg: Gothenburg University.

Blommaert, Jan 2010. *The sociolinguistics of globalization*. Cambridge: Cambridge University Press.

Blommaert, Jan & Jie, Dong 2010. *Ethnographic fieldwork: a beginner's guide*. Bristol: Multilingual Matters.

Davies, Charlotte Aull 2008. *Reflexive ethnography: a guide to researching selves and others*. 2. [rev. and updated] ed. London: Routledge.

He, Agnes Weiyun 2004. CA for SLA: Arguments from the Chinese language classroom. *Modern Language Journal* 88, pp. 568–582.

Heritage, John & Maynard, Douglas W. (eds.) 2006. *Communication in medical care: interaction between primary care physicians and patients*. Cambridge: Cambridge University Press.

Håkansson, Gisela & Norrby, Catrin 2010. Environmental influence on language acquisition. Comparing second and foreign language acquisition of Swedish. *Language Learning* 60:3, pp. 628–650.

Kahlin, Linda & Tykesson, Ingela 2012. Att få grepp om samtalskontexten. Observationer och intervjuer på callcenter i Sverige och Moldavien. In: Karlsson, Anna-Malin, Landqvist, Mats & Rehnberg, Hanna Sofia (eds.), *Med språket som arbetsredskap: sju studier av kommunikation i vården.* Huddinge: Södertörn University. S. 91–104.

Kasper, Gabriele 2006. Beyond repair: Conversation analysis as an approach to SLA. *AILA Review*, 19, pp. 83–99.

Kasper, Gabriele 2000. Data collection in pragmatic research. I: Spencer-Oatey, Helen (ed.): *Culturally speaking: Managing rapport through talk across cultures*. London: Cassel. Pp. 316–341.

Kitzinger, Jenny 1995. Qualitative research. Introducing focus groups. *BMJ: British medical journal*, *311*(7000), P. 299–302.

Larsen-Freeman, Diane & Long, Michael H. 2014. *An introduction to second language acquisition research*. London and New York: Routledge.

Linell, Per 2011. *Samtalskulturer: Kommunikativa verksamhetstyper i samhället. Vol. 1 och 2*. Linköping: Institutionen för kultur och kommunikation, Linköping University.

Linell, Per & Thunqvist, Daniel Persson 2003. Moving in and out of framings: activity contexts in talks with young unemployed people within a training project. *Journal of pragmatics*, *35*(3), pp. 409–434.

Lundgren, Charlotte 2009. *Samarbete genom samtal: en samtalsanalytisk studie av multiprofessionella teamkonferenser inom smärtrehabilitering*. Linköping: Linköping University.

Markee, Numa, & Kasper, Gabriele 2004. Classroom talks: An introduction. *The Modern Language Journal*, *88*(4), pp. 491–500.

Maynard, Douglas W. & Heritage, John 2005. Conversation analysis, doctor–patient interaction and medical communication. *Medical education*, *39*(4), pp. 428–435.

Melander, Helen & Sahlström, Fritjof 2011. Process eller produkt? Om samtalsanalysens möjligheter att studera lärande i interaktion. In: *Lärande och minnande: som social praktik*. Säljö, Roger (ed.). Stockholm: Norstedts.

Melander Marttala, Ulla 1995. *Innehåll och perspektiv i samtal mellan läkare och patient: en språklig och samtalsanalytisk undersökning*. Uppsala: Uppsala University.

Melander Marttala, Ulla & Mattsson, Elisabet 2017. Fackord i samtal och texter om barns hjärtfel. In: *Svenskans beskrivning 35*. Pp. 215–227.

Nestel, Debra & Tierney, Tanya 2007. Role-play for medical students learning about communication: Guidelines for maximising benefits. *BMC Medical Education*, 2007, 7:3, 9 pages (not paginated).

Nguyen, Hanh thi & Kasper, Gabriele (eds.) 2009. *Talk-in-interaction: multilingual perspectives*. Honolulu, Hawaii: National Foreign Language Resource Center-University of Hawaii.

Pryor, Elizabeth & Woodward-Kron, Robyn 2014. International medical graduate doctor to doctor telephone communication: A genre perspective. *English for Specific Purposes* 35, pp. 41–53.

Rampton, Ben, Roberts, Celia, Leung, Constant & Harris, Roxy 2002. Methodology in the analysis of classroom discourse. *Applied Linguistics*, 23 (3), pp. 373–392.

Roberts, Celia, & Sarangi, Srikant 2003. Uptake of discourse research in interprofessional settings: Reporting from medical consultancy. *Applied linguistics*, *24*(3), 338–359.

Sacks, Harvey 1992. *Lectures on conversation*. Oxford: Blackwell Publishers

Sarangi, Srikant 2000. Activity types, discourse types and interactional hybridity: the case of genetic counselling. *Discourse and social life*, *5*, 1–27.

Sarangi, Srikant 2007. The anatomy of interpretation: Coming to terms with the analyst's paradox in professional discourse studies. *Text & Talk* 27–5/6, pp. 567–584.

Sarangi, Srikant & Roberts, Celia (eds.) 1999. *Talk, work and institutional order: discourse in medical, mediation and management settings*. Berlin: Mouton de Gruyter.

Socialstyrelsen 2015. *Nationella planeringsstödet 2015 – Tillgång och efterfrågan på vissa personalgrupper inom hälso- och sjukvård samt tandvård*. https://www.socialstyrelsen.se/Lists/Artikelkatalog/Attachments/19727/2015-2-33.pdf

Spradley, James P. 1980. *Participant observation*. New York: Holt, Rinehart and Winston.

Stokoe, Elizabeth 2011. Simulated interaction and communication skills training: The 'conversation-analytic role-play-method'. In: Antaki, Charles (ed.) *Applied conversation analysis: intervention and change in institutional talk*. Basingstoke: Palgrave Macmillan. Pp. 119–139.

Svensson, Staffan, Linell, Per & Kjellgren, Karin 2008. Making sense of blood pressure values in follow-up appointments for hypertension. *International Journal of Cardiology*, 123. Pp. 108–116.

Söderlundh, Hedda 2010. *Internationella universitet – lokala språkval: om bruket av talad svenska i engelskspråkiga kursmiljöer*. Uppsala: Uppsala University.

ten Have, Paul 1991. Talk and institution: a reconsideration of the 'asymmetry' of doctor-patient interaction. In: Boden, Deidre & Zimmerman, Don H. (eds.), *Talk and social structure: studies in ethnomethodology and conversation analysis*. Cambridge: Polity Press. Pp. 138–63.

Thomassen, Gøril 2005. *Den flerbunnete treningssamtalen: en studie av samtaler mellom pasient og student fra sykepleier- og medisinerutdanning*. Trondheim: NTNU.

Thomassen, Gøril 2008. The role of role-play: managing activity ambiguities in simulated doctor consultation in medical education. *Communication & medicine*, 6 (1), pp. 83–93.

Tykesson, Ingela, Kahlin, Linda & Romanitan, Mihaela (2017). Samma arbete, nytt språk – byte av arbetsspråk för läkare med utländsk bakgrund. In: Bendegard, Saga, Melander Marttala, Ulla & Westman, Maria (eds.), *Språk och norm, rapport från ASLA:s symposium i Uppsala, 21–22 april 2016*. ASLA:s skriftserie 26. Uppsala: Uppsala University. S. 139–146.

Tykesson, Ingela, Kahlin, Linda, & Romanitan, Mihaela (manuscript under review). Rollspel med läkare som lär sig svenska.

Van de Poel, Kris 2013. *Communication skills for foreign and mobile medical professionals*. Berlin Heidelberg: Springer.

Wette, Rosemary 2011. English proficiency tests and communication skills training for overseas-qualified health professionals in Australia and New Zealand. *Language Assessment Quarterly, 8* (2), pp. 200–210.

Wolanik Boström, Katarzyna & Öhlander, Magnus 2012. A troubled elite? Stories about migration and establishing professionalism as a Polish doctor in Sweden. *COMCAD Arbeitspapiere –Working Papers* No. 110. Bielefeld: Center on Migration, Citizenship and Development.

Woodward-Kron, Robyn & Elder, Catherine 2016. A comparative discourse study of simulated clinical roleplays in two assessment contexts: Validating a specific-purpose language test. *Language Testing*, 33(2), pp. 251–270.

Young, *Richard F. 2011. Interactional competence in language learning, teaching, and testing*. In: Hinkel, Eli (ed.). *Handbook of research in second language teaching and learning. Vol. 2*. New York: Routledge.

Young, *Richard* F. & Miller, Elizabeth R. (2004), Learning as changing participation: Discourse roles in ESL Writing Conferences. *The Modern Language Journal*, 88(4), pp. 519–535.

Transcription key

D	doctor
N	nurse
P	patient
(.)	short but clear pause, 'micro pause'
<u>what</u>	emphasis
do:	vowel lengthening
do::	extended vowel lengthening
befo-	interruption, for instance, interrupted word
D: thank [you	overlapping speech
N: [thanks	
((to the nurse))	non-verbal aspect or comment on activity
☺well☺	said with laughing voice
(oh yeah)	possible interpretation of speech that is difficult to hear
oh?	question intonation

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