Use of other-repetitions/reformulations as feedback by foreign and

Swedish physicians in medical consultations

Nataliya Berbyuk Lindström, PhD

Department of Applied IT Chalmers and University of Gothenburg

berlinds@chalmers.se

Abstract

In medical consultation, understanding between physician and patient is essential for the quality of the care. Confidence in understanding is especially important in intercultural medical consultations as language problems and cultural differences may cause problems in interactions.

This study presents an analysis and comparison of how foreign and Swedish physicians use repetitions and reformulations of their patients' utterances in order to indicate and check understanding. The analysis is based on 63 recordings of medical consultations (34 foreign physician-Swedish patient and 29 Swedish physician-Swedish patient consultations). Activity-based communication analysis is used to analyze the material.

The results show that the foreign physicians tend to repeat and to reformulate (parts of) their patients' utterances more often than the Swedish ones. Some of the reasons are uncertainty concerning understanding, language factor and consequent increased need to check and "record" information provided by interlocutor compared to native speakers. The fact that those foreign physicians who spent the least time in Sweden produce more repetitions and reformulations may confirm the influence of language acquisition. Furthermore, the native languages of foreign physicians might also have an impact on the frequency of use of this communicative strategy.

1 Introduction

1.1 Foreign physician-native patient communication

While there is a relatively large body of research focusing on native physician - foreign patient communication, little research has been done on the opposite situation, i.e. foreign physiciannative patient communication, though foreign physicians are common in many countries, such as USA (Steward, 2003, McMahon, 2004), Australia (Birrell, 2004), the United Kingdom (Swierczynski, 2002, Sandhu, 2005), and Canada (Hall et al., 2004). In the above-mentioned countries, non-native physicians represent between 23 and 28 percent of physicians (Mullan, 2005). In 2009, about 55% of all physicians who were granted medical licenses had been educated outside Sweden (Socialstyrelsen, 2009).

At this moment, few studies have yet reported on foreign physicians and their communication with patients. Such issues as differences in views on doctor-patient relationships and problems with foreign language usage, understanding dialects, colloquial speech and questioning of the quality of physicians' medical education have been raised (Berbyuk Lindström, 2008).

Successful physician-patient communication is important for quality of health care. An essential element in communication is understanding. Showing understanding is "the least one can demand from a cooperative receiver is that he acknowledges apprehension and understanding, so that the sender has a chance of knowing if he has got his information across" (Allwood, 1976). If it is not clear that the information has been understood, checking is necessary to avoid lack of understanding/misunderstanding, missing information, uncertainty, stress and anxiety. It is especially important in intercultural communication,

when language problems and cultural differences often present challenges to interactants.

In intercultural foreign physician-Swedish patient consultations, anxiety and uncertainty of the patients about the physicians' understanding of their problems often together with experiences of pain and suffering is be an unfavorable combination (Berbyuk Lindström, 2008). Thus, the physicians' expression of understanding of what their patients say and verification if they understand their patients correctly are essential factors to ensure the quality of care provided.

1.2 Aim of the study

This study focuses on analysis and comparison of foreign and Swedish physicians use of repetitions and reformulations of the utterances of their patients as a feedback tool for indicating and checking understanding during medical consultations.

2 Background

2.1 Verbal feedback in interaction

Linguistic feedback defined as "linguistic mechanisms which ensure that a set of basic requirements on communication, such as possibilities for continued contact, for mutual perception and for mutual understanding can be met" (Allwood, 2003, p.1). Allwood categorizes into simple feedback units (which consist of one word) such as yeah and mm and secondary FB units such as adjectives, adverbs, conjunctions, pronouns, verbs and nouns, which may be used for feedback purposes, but which have other important functions in the language as well, for example good, certainly, etc. Other categories comprise reduplications of simple FB units such as yeah yeah; deictic and anaphoric linking (often by reformulating preceding utterances), such as English I do, it is, Swedish de e de, de gör ja; idiomatic phrases such as thank you very much; and modal phrases such as I think so.

Functionally, two primary feedback (FB) functions can be distinguished: FBG (feedback giving or "pure feedback") and FBG/FBE (feedback giving and elicitation). FBG is used to indicate that one is listening to and understanding what the interlocutor says and to express attitude, for example, (dis)agreement, emotions, etc. The FBG/FBE function stands for both showing listening and understanding and checking whether one has heard and understood what the interlocutor said by eliciting a response in the form of confirmation or additional specification.

2.2 Other repetions/reformulations as feedback

Repetitions and reformulations of (parts of) interlocutors' utterances, so-called echo-backchannels (Sugito et al., 2000), allo-repetitions (Tannen, 1989), interactive repetitions/reformulations (Martinovsky, 2001) or other-repetitions (Long, 1981, Svennevig, 2004) have multiple functions in interactions. Sugito et al. (2000), in their analysis of Japanese informal conversations, emphasize that repeating what the other speaker says indicates willingness to interact and involvement in the interaction. Perrin et al. (2003, p. 1849) present a summary of the functions of repetitions such as a taking into account function, "by which a speaker indicates that what was just said by the interlocutor has been heard and interpreted" (corresponds to Allwood's pure FBG function of repetition); a confirmation request function (signaling a problem related to some aspect of the interlocutor's talk), "by which a speaker seeks confirmation or a specification of what has just been said by the interlocutor" (corresponds to Allwood's FBG/FBE function); a positive reply function, "by which a speaker expresses agreement with the preceding talk of the interlocutor"; and a negative reply function, "by which a speaker expresses disagreement with what the interlocutor has just said" (both are subcategories

of FBG).

Svennevig (2004) shows how other-repetitions are often used to display the receipt of information in interactions between native Norwegian clerks and their non-native clients, pointing out the impact of intonation on the function of repetition, showing that a plain repeat with falling intonation is a display of hearing while a repeat plus a final response particle, *ja* ('yes'), constitutes a claim of understanding. The use of rising intonation can also display emotional stance (surprise or interest) (p. 489).

Allwood (1988) points out that repetitions/reformulations are widely used by language learners as means for feedback giving and elicitation, especially early in acquisition process, since they are "a simple means of feedback giving for the learner who does not have many other means of expression" (p. 277). The use of repetitions/reformulations is observed to decrease over time; they seem to be replaced by primary feedback units. Furthermore, the native speakers in the above-mentioned study produced little repetition compared to the non-native speakers.

The use of repetitions/reformulations depends upon a number of factors, such as a particular speaker's characteristics, activity type and how common the use of repetitions/reformulations for feedback giving/eliciting is in the speaker's native language. Culture can also be a contributing factor, as Tannen points out: "for individuals and cultures that value verbosity and wish to avoid silences in casual conversation, repetition is a resource for producing ample talk, both by providing material for talk and by enabling talk through automaticity" (Tannen, 1989, p. 48).

The above-mentioned functions of repetitions and reformulations make them both relevant and interesting to investigate in the context of medical consultation. In spite of the apparent scarcity of research on repetitions/reformulations in medical context, their positive impact on communication between physician and patient cannot be overestimated. In his book on communication with patients, aimed at medical students, Bendix (1980) stresses the importance of repeating the patient's last words; among other things, this strategy can encourage the patient to become more open, help to make the issues discussed clearer, and keep both participants interested.

These outcomes are essential for the quality of care. In addition, it might be interesting to see how non-native speakers in a higher position (foreign physicians) than native speakers use this type of feedback to ensure understanding, as well as the possible influence of culture.

3 Methods

3.1 Recordings and participants

Video and audio-recordings for the study were made in health care centers and hospitals in Western Sweden between 2005-2007. The choice of the institutions was influenced by availability of the participants who agreed to participate in the study. The consultations were recorded after obtaining written consent from all involved in the recordings. No researcher was present during the consultations.

Sixty-three (63) recordings are used for this study (34 foreign physician-Swedish patient and 29 Swedish physician-Swedish patient consultations). Total recording time is about 15 hours (about 9 for intercultural and 6 for Swedish consultations). Thirteen (13) foreign and seven (7) Swedish physicians participated in the study.

The majority of foreign physicians come from Hungary (4, Hungarian group) and Iran (5, Iranian group). Other physicians are from Germany,

Colombia, former USSR (Russia) and former Yugoslavia. Age range is 34-56 years.

Partici pant code	Age	Gender	Specialty	Years a	s physician	Time in Sweden (years)
				in home country		
Hungarian	grou	р				
HuD1	45	male	anesthesiology	20	1	1
HuD2	34	female		7	1	1
HuD3	36	male		9	1.5	1.5
HuD4	44	male		11	2	2
Iranian gr	oup					
IraD5	49	female	geriatrics, rehabilitation	4	10	13
IraD6	40	female	general practice	5	>1	7
IraD7	45	male	surgery	5	13.5	14
IraD8	48	male	ophthalmology	3.5	16	17
IraD9	50	female	obstetrics, gynecology	8	15	18
Mixed group						
GerD10	56	male	orthopedics	30	1	1
ColD11	39	male	surgery	2	10	12
RusD12	45	female	general practice	45	10	14
YugD13	35	female	anesthesiology	>4	>2	2

Table 1: Foreign physicians demographics

Seven Swedish physicians (5 male and 2 female), 4 surgeons and 3 general practitioners, age range 27-52 years have been involved. The patients are native Swedes, aged between 20 up to 89 years.

3.2 Transcription and coding

The recordings of the consultations were transcribed and checked (Allwood et al., 2000, Nivre et al., 2004), the communication was analyzed using activity-based communication analysis (Allwood, 2003). The transcriptions in the article are presented in the Swedish original and an English translation. In the table below, transcription conventions are presented:

Symbol	Explanation		
\$P, \$D,	participant (patient, doctor)		
[]	overlap brackets; numbers used to indicate the overlapped parts		
/, //, ///	short, intermediate and long pause, respectively		
+	incomplete word, pause within word		
CAPITALS	stress		
•	lengthening		
<>, @ <>	comments about non-verbal behavior, comment on stan- dard orthography, other actions		
< SO: du >	SO stands for standard orthography. The dialectal forms of Swedish and incorrect forms used by the foreign physicians are commented		

Table 2: Transcription conventions

An overview of corpus is presented below:

Participant categories	Number of words	Participa: categorie		Number of words
ICCMedCo	nsult	Sw	еМес	lConsult
Consultation types: an gynecology, eye, gener rehabilitation, intensiv pedics, surgery	surgery and general practice			
Foreign physicians	31 037	Swedish pl	ıysi-	28 727
Hungarian physicians 9 352		cians		
Iranian physicians]			
Mixed physicians	9 573			

Table 3: Corpus

In the coding, I distinguish between repetitions and reformulations. The repetitions and reformulations are divided into those used for feedback giving (FBG) and those used for both feedback giving and eliciting (FBG/FBE). FBG and FBG/FBE are distinguished as follows. Repetitions/reformulations that do not evoke confirmation from the interlocutor in the next utterance are coded as FBG while those that evoke such confirmation are coded as FBG/FBE. In addition, in the case of repetitions and reformulations for FBG, falling intonation is used. When the repeated/reformulated segment is used with interrogative (rising) intonation, it is coded as FBG/FBE. When intonation is interrogative, it encourages the production of feedback from the interlocutor. However, the absence of interrogative intonation does not rule out the production of feedback in the next utterance. Therefore, sequences in which the repeated element is followed by confirmation from another speaker constitute a primary criterion for distinguishing between FBG and FBG/FBE. The repetitions and reformulations produced by the foreign and Swedish physicians were extracted from the transcriptions and analyzed. All the repetitions and reformulations are grouped on the basis of their function into FBG and FBG/FBE categories.

4 Results

4.1 Repetitions and reformulations for feedback giving (FBG)

Both foreign and Swedish physicians use repetitions and reformulations to give feedback, repeating (part of) their patients' answers to their questions to show that they listen to what their patients say. This strategy is also used to "record" new information provided by patient (e.g., a new symptom that might be worth paying attention to). Svennevig (2004) comments that such repeats often occur after statements presenting new (and often specific) information, and can therefore be called "information receipts" (p.490). Declarative intonation is used in these cases, not interrogative. Consider the example below:

	Transcription	Translation into English
\$D:	m // men e hade du mag-	m // but er did you have a gas-
	blödning eller magsår eller [1	tric hemorrhage or a gastric
	nej inget sånt]1	ulcer [1 no nothing like that]1
\$P:	[1 nä nä nä]1 de har ja nog inte	[1 no no no]1 I don't think I've
	haft men ja har haft problem <1	had that but I've had problems
	me magen va // [2 att]2 ja har	<1 with my stomach // [2 see
	fått ja kan ju inte äta va som	12 I've got I can't eat just
	helst >1 [3 för då]3 / får ja	anything >1 [3 because then]3

halsbränna å [4 å andra]4 <	2 / I get heartburn and [4 and
å rapar >2 väldit mycke rap-	other]4 <2 and burp >2 a lot
ningar	of belching
@ <1 hand gesture: left hand or	n stomach >1
@ <2 hand gesture: left hand m	oving up towards the throat >2
\$D: [2 m]2	[2 m]2
SD: $[3 < jaha >]3$	[3 < I see >]3
@ < head movement: nod >	
SD: [4 < halsbränna >]4	[4 < heartburn >]4
@ < head movement: nod >	
\$D: jaha // ja // och e är du allergi	isk I see // well // and er are you
mot någonting	allergic to anything

Example 1: Heartburn (HuD2)

First, the physician gives feedback using *m* and *jaha* together with a head nod. However, she also nods and repeats the word *halsbränna* ('heartburn'), which constitutes more exhaustive feedback. It is also a way of "recording" a new symptom and marking a concept important for giving a diagnosis. In similar examples from the data, simple feedback items such as *jaha*, *ja*, *jaså*, *okej*, *mm*, etc., are often combined with nonverbal behavior (e.g., nod, smile, long pause, etc).

Physicians also tend to paraphrase their patients' utterances for the same purpose – to give feedback, show that they are listening and retain information delivered by the patients. Reformulations represented in the data are primarily the result of grammatical and lexical changes. For example, when a physician asks on which side the patient is feeling pain in, the patient answers *i höger* ('in the right'), which is followed by the physician's feedback, *i höger sida* // okej ('in the right side // okay'). Here, the physician reformulates the patient's utterance, adding the word sida ('side'), to provide feedback.

A common reformulation type in medical consultation results from a deictic shift of person, which can be explained by the influence of the activity structure: two main participants, physician and patient, are involved in interaction.

Consider the example below:

	Transcription	Translation into English
\$D:	du ska opereras idag	you will have surgery today
\$P:	m vet [ja]	m [I] know
\$D:	[vet du] m // har du nån e	[you know] m // do you have
	problem som du vill // prata	any er problem that you want to
	om	// talk about

Example 2: I know (HuD4)

Feedback is used to show contact, perception and understanding, as well as the speaker's attitude. The example below shows a physician who uses reformulation to give feedback and shows his agreement with the patient:

	Transcription	Translation into English
\$D:	ha du haft ont i ögat nån gång	have you ever felt any pain in
		your eye
\$P:	aldri de bara att / ja ser dåligt	never it's just that / I have poor
		eyesight
\$D:	du ser dåligt me de ögat ja //	you have poor eyesight in that
	å så helt plötslit	eye I see // and then all of a
	_	sudden

Example 3: Poor eyesight (SweD2)

In addition to giving feedback by reformulating the patient's utterance *jag ser dåligt* ('I have poor eyesight'), the physician shows his agreement and confirms his awareness of the patient's problem.

Repetitions and reformulations are also used to express emotions such as surprise as in the example below:

	Transcription	Translation into English
\$D:	hur har du [mått]	how have you [been]
\$P:	[ja] allså nu kan ja ju tala om	[well] now I can tell you that
	att ja har gått ner ungefär	I've lost about twenty five kilos
	tjufem kilo i vikt / från å me	in weight / since last year
	förra året //	
\$D :	tjufem kilo / de e mycke de	twenty-five kilos / that's a lot
\$P:	a:	yeah

Example 4: Twenty-five kilos (SweD5)

The physician gives feedback of understanding and expresses his surprise about the patient's weight loss by repeating part of her utterance.

To summarize, foreign and Swedish physicians use repetitions and reformulations of their patients' utterances (often answers to the physicians' questions) for feedback purposes (i.e., to show attention and understanding, as well as to express emotions, agreement, etc. Repetitions and reformulations are also a tool used to "record" the information provided by the patients and to elicit confirmation from them.

4.2 Repetitions and reformulations for feedback giving and feedback elicitation (FBG/FBE)

In addition to using repetitions and reformulations just to give feedback, the physicians use them to simultaneously give and elicit feedback (FBG/FBE). Consider the example below from an interaction between an Iranian male physician and his Swedish patient:

	Transcription	Translation into English
\$D:	i vilket öga tar du droppar	in which eye do you take drops
\$P:	< vänster >	< <i>left</i> >
(a) <	hand gesture: left hand pointing	at left eye >
\$D :	vänster	left
\$P:	ja	yeah
\$D:	e höger har du inga [droppar]	er right you don't use [drops]

[nej] nej // ja tar en på / moron å två på kvällen	[no] no // I take one in / the morning and two in the eve-
	ning

Example 5: Left eye (IraD9)

The patient answers the physician's question, and the physician repeats that answer (vänster ['left']). The patient's next utterance is a simple feedback item ja ('yes'), confirming the information he has already provided, which the physician was attempting to check correct receipt of by using repetition. As we can see, the repetition here serves not only to show that the physician is listening and remaining involved, but also to check that the information has been understood correctly. The repetition in the example above does not have interrogative intonation, whereas other cases presented in the data do. As I mentioned earlier, interrogative intonation encourages the interlocutor to produce a confirmation in the next utterance. Furthermore, the feedback provided may be limited to a simple feedback unit (as above), but it can also be combined with more detailed information:

	Transcription	Translation into English
\$D:	< okej > [va e de för fel]	< okay > [what's the problem]
\$P:	[både fysist] och psykist	[both physically] and psycho-
		logically
\$D:	mestadelen > alltså	< mostly> that is
\$P:	både och	both
\$P:	< både och >	< both >
<u>a</u> <	head movement: nods >	
\$P:	ja e: <> fysist e att ja ö e ja	well er < > physically it's that I
	tror ju personlien ja har inte ja	er er why personally I think I
	har inte sett röntgenbilderna	haven't seen the X-ray pictures
(a) <	hand gesture start: left hand or	right shoulder >

Example 6: Both (IraD8)

The patient states that he feels bad both physically and psychologically (*både och* ('both')). This is repeated by the physician and is followed by the patient's detailed explanation of why he feels bad (both non-verbally by putting his hand on the shoulder where the pain is localized and by expressing his anxiety).

Reformulations are also used to both give and elicit feedback. This is exemplified by an excerpt from an interaction between a Russian female physician and her male patient:

	Transcription	Translation into English
	cket för att lyssna på hjärtat // men du e duktig / du RÖR på dej / du springer till < buss+>	let's see then / I will measure / your blood pressure to listen to your heart // but you are doing well / you EXERCISE / you run to the < bus+ > bus
(a) <	cutoff: bussen/the bus >	
\$P:	nä: nu // ja gå till bussen	why now // I walk to the bus

\$D:	du går till bussen	you walk to the bus
\$P:	ja springer gör jag inte	yeah I don't run
\$D:	för vadå	why
\$P:	va	what
\$D:	varför då varför inte	why why not
\$P:	nä: ja orkar inte	no I don't have the strength
\$D:	de du orkar inte	you don't have the strength
\$P:	nä det e va vet du / det får så	no it's you know / my feet
	ont i fötterna	hurt so much so then

Example 7: Bus (RusD18)

As we can see, a misunderstanding that has occurred earlier in the conversation – the physician assumes that the patient runs to the bus whereas actually he walks – results in the physician complimenting her patient: du e duktig / du RÖR på *dej / du springer till < buss+ > bussen* ('you are doing well / you EXERCISE / you run to the < the bus+>'). When the patient denies this, saying jag går till bussen ('I walk to the bus'), the physician uses reformulation (deictic shift of person) with an interrogative intonation, du går till bussen ('you walk to the bus?'), to make sure she understands the patient correctly. The patient confirms it (ja springer gör jag inte ['yeah, I don't run']) and expresses his reason for not doing so (nä jag orkar inte ['no, I don't have the strength]) in response to the physician's question (varför då varför inte ['why, why not?']). Here, by repeating her patient's utterance, the physician is again checking to make sure she understands him correctly.

Both foreign and Swedish physicians use repetitions and reformulations of their patients' utterances to give feedback and make sure they have understood information correctly, eliciting confirmation from the patients.

5 Results: Quantitative analysis

The occasions when the physicians use repetitions and reformulations for FBG and FBG/FBE were counted; the numbers are expressed in parts per million (PPM). To verify the significance of differences $\alpha 2$ tests were used

differences, χ_2 tests were used.										
Participant cate- gory/type	Fo	reign p	hysici	ans	Swedish Physicians					
	FBG		FBG/FBE		FBG		FBG/FBE			
Type rep/ref	rep	ref	rep	ref	rep	ref	rep	ref		
Total per category	4830	1640	1579	1382	1184	627	174	313		
Total rep+ref:	6470		2961		1811		487			

Table 4: Repetitions and reformulations used by physicians and patients in PPM¹

The foreign physicians produce more repetitions and reformulations than the Swedish physicians for both FBG (total rep+ref FBG: 6,470 vs. 1,811, $\chi 2 = 51.92$ [df = 1], p < .001) and FBG/FBE (total rep+ref FBG/FBE: 2,961 vs. 487, $\chi 2 = 37.88$ [df = 1], p < .001).

Looking at the data for the different cultural groups, the following picture can be observed:

	Hungarian physi- cians				Ira		n phy ans	ysi-	Mixed group			
Partici-	FBG		FBG/		FBG		FBG/		FBG		FBG/	
pant			FBE				FBE				FBE	
cate-				i								
gory/ty												
pe	pe											
Туре	rep	ref	rep	ref	rep	ref	rep	ref	rep	ref	rep	ref
rep/ref	_											
Total	9078	3631	2136	2350	2310	577	1237	1237	3861	1044	1461	626
per												
cate-												
gory/ty												
pe												
Total	12709		4486		2887		2474		4905		2087	
rep+ref												

Table 5: Cultural groups: repetitions and reformulations in PPM ²

Repetitions and reformulations are used most by the Hungarian physicians, followed by the Mixed group physicians and then the Iranian physicians.

6 Discussion

The foreign physicians use more repetitions and reformulations of their patients' utterances to give and elicit feedback than the Swedish physicians. This might be related to the greater need for foreign physicians to show their understanding and check the information provided by their patients compared the Swedish physicians, as a strategy to prevent lack of understanding/misunderstanding in communication. It might also be a result of the language acquisition process, confirming what Allwood (1993a) mentions concerning the use of repetitions and reformulations by language learners to give and elicit feedback.

Both foreign and Swedish physicians use repetitions more than reformulations for FBG. However, for FBG/FBE, the foreign physicians use repetitions more than reformulations, while the

¹ PPM is determined as follows: number of occurrences of repetitions/reformulations ÷ number of tokens for

the participant category (foreign physicians = 31,037 and Swedish physicians = 28,727) x 1,000,000.

² PPM is determined as follows: number of occurrences of repetitions/reformulations ÷ number of tokens for the participant category (Hungarian physicians = 9,352; Iranian physicians = 12,112, Mixed group physicians = 9,573) x 1,000,000.

opposite is true of the Swedish physicians. One might presume that it is more complicated to paraphrase than to simply repeat, and that the language competence factor might be reflected in the native speakers' tendency to paraphrase more than the non-native speakers. However, there are not enough data to draw any definite conclusions.

Concerning the linguistic and cultural background of foreign physicians, the fact that the Hungarian physicians and the physicians from the Mixed group, who have spent the least time in Sweden, produce more repetitions and reformulations may confirm the influence of language acquisition on the use of repetitions and reformulations. In addition, the foreign physicians' native languages, more specifically how often repetitions/reformulations are used in the foreign physicians' native languages, may influence how they use them in Swedish. Unfortunately, no linguistic studies on this issue for Hungarian, Farsi, Russian, or Bosnian are known to me, so I cannot speculate further on this issue. Concerning German and Spanish, it is worth mentioning that some data on the use of feedback (primarily concerning the use of simple FB words) in these languages (as well as Swedish, Dutch, English, French, Arabic, Finnish, Italian, Punjabi and Turkish) have been presented by Allwood (1993a). As mentioned above, Allwood points language learners use out that tions/reformulations for feedback, especially in the initial stages of language acquisition, with a gradual decrease for the majority of learners (but not all) as language acquisition proceeds. It is interesting that speakers who are observed not to decrease their use of repetition for feedback include Finnish and Spanish learners of Swedish, which might indicate the influence of their native languages.

Another point worth mentioning here is that the analysis of the non-native speakers' use of repetitions and reformulations was done in a context in which they are in a superior position to native speakers, which is an uncommon perspective in research. The analysis shows that non-native speakers in a superior position talking to native speakers in a subordinate position use repetitions and reformulations more than native speakers interacting with subordinates of the same linguistic (and cultural) background. In addition, a number of factors have been mentioned that might contribute to the foreign physicians using more repetitions/reformulations for feedback than the Swedish physicians. It is im-

portant to add that the fact that the non-native speakers are responsible for the interaction might lead to their using repetitions and reformulations as a more comprehensive type of feedback.

Is there anything in the data that might signal cultural differences? As has already been mentioned, the power distance in Sweden is shorter than in the countries the foreign physicians come from; thus, one can assume that a more paternalistic type of relationship between physician and patient, in which the physician has control over the interaction and core responsibility for the choice of treatment, predominates in those countries. On the contrary, the mutuality type of relationship (more common in Sweden than in the foreign physicians' home countries) presupposes informality and shared responsibility for the interaction; the physician acts as a counselor or advisor (Herlitz, 2003, Berbyuk Lindström, 2008). This difference in the view of the physician's role might result in the foreign physicians' using repetitions and reformulations a good deal in order to show their patients that they have the ability to bear responsibility for the interaction in spite of speaking a foreign language and (possibly) experiencing cultural differences. Repetitions and reformulations represent a way to provide more exhaustive feedback than other kinds of feedback. Repeating/reformulating (part of) what the interlocutor says is a clear and powerful way to show that one is listening to and participating in the interaction. This is essential for medical interactions in general, and intercultural medical encounters in particular.

References

Jens Allwood. 1976. *Linguistic Communication as Action and Cooperation*. Göteborg: Department of Linguistics, Göteborg University, Sweden.

Jens Allwood. 1988. Feedback in Adult Language Acquisition (Final Report Ii). Ecology of Adult Language Acquisition (ESF).

Jens Allwood. 2007. Activity Based Studies of Linguistic Interaction. In: Gothenburg Papers in Theoretical Linguistics (93), Department of Linguistics, Göteborg University.

Jens Allwood, Elisabeth Ahlsén, Leif Grönqvist and Magnus Gunnarsson. 2003. Annotations and Tools for an Activity Based Spoken Language Corpus. In J. van Kuppevelt and R.W. Smith, eds., Current and New Directions in Discourse and Dialogue. Dordrecht, The Netherlands: Kluwer Academic Publishers.

- Torben Bendix. 1980. Din nervösa patient: Det terapeutiska samtalet: Introduktion till en undersökningsteknik du aldrig fick undervisning i. Lund: Studentlitteratur.
- Nataliya Berbyuk Lindström. 2008. *Intercultural-communication in health care Non-Swedish physicians in Sweden*. Department of Linguistics. University of Gothenburg.
- Robert Birrell. 2004. Australian Policy on Overseas-Trained Doctors. *Med J Aust* 181:635-639.
- Pippa Hall, Erin Keely, Susan Dojeiji, Anna Byszewski and Meridith Marks. 2004. Communication Skills, Cultural Challenges and Individual Support: Challenges of International Medical Graduates in a Canadian Healthcare Environment. *Med Teach* 26:120-125.
- Herlitz, Gillis. 2003. *Svenskar: Hur Vi Är Och Varför*. Uppsala: Konsultförl./Uppsala Publ. House.
- Michael Long 1981. Native Speaker/Non-NativeSpeaker Conversation and the Negotiation of Comprehensible Input. *Applied Linguistics 4*
- Bilyana Martinovsky. 2001. The Role of Repetitions and Reformulations in Court Proceedings: A Comparison of Sweden and Bulgaria. Göteborg: Department of Linguistics, Göteborg University.
- Graham T. McMahon. 2004. Coming to America-International Medical Graduates in the United States. N Engl J Med 350:2435-2437.
- Laurent Perrin, Denise Deshaies and Claude Paradis. 2003. Pragmatic Functions of Local Diaphonic Repetitions in Conversation. *Journal of Pragmatics* 35:1843.
- David Sandhu. 2005. Current Dilemmas in Overseas Doctors' Training. *Postgrad Med J* 81:79-82.
- David E. Steward. 2003. The Internal Medicine Workforce, International Medical Graduates, and Medical School Departments of Medicine. Am J Med 115:80-84.
- Miyoko Sugito, Nagano-Madsen Yasuko and M. Kitamura. 2000. Analysis of Echo Backchannels in a Lively Multi-Speaker Conversation in Japanese. Fonetik 2000 (The Swedish Phonetics Conference) 129-133.
- Socialstyrelsen (Swedish National Board of Health Care and Welfare). 2008. Statistics. http://www.socialstyrelsen.se/english. Retrieved 20111015
- Jan Svennevig. 2004. Other-Repetitions as Display of Hearing, Understanding and Emotional Stance. *Discourse Studies* 6:489-516.
- Martha Swierczynski. 2002. Induction Courses for International Doctors. *Bmj* 325:S159.

Deborah Tannen. 1989. *Talking Voices: Repetition, Dialogue, and Imagery in Conversational Discourse*. Cambridge: Cambridge Univ. Press.