Facing the difficult questions in Question Time

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Abstract: When university students are preparing to give a talk, the prospect of facing difficult questions in Question Time can be a major source of anxiety. For their teachers, Question Time provides the opportunity to make some constructive comments about the projects taking place in their department. The participants in this study were 9 lecturers and 18 students giving progress talks on their individual projects in fourth year Electronic Engineering. The talks, along with their accompanying Question Times, were video-recorded and transcribed. This report focuses on Question Time, in particular the interactions around those questions that are clearly difficult to answer. The language is analysed using an approach based on Discourse Analysis. Seven excerpts are selected to exemplify some of the behaviours of lecturers and students. Lecturers frame their questions so that students can demonstrate what they <u>do</u> know; lecturers step in to clarify another lecturer's question or to join in a discussion arising out of a difficult question; and lecturers acknowledge their own lack of certainty. Students use pauses, repetition, fillers and reformulations to give themselves time; they take responsibility for omissions and errors; they use humour to deal with embarrassment; and some assert their status by addressing lecturers by name. As educators, reflecting on these behaviours can help us examine the impact of our own questioning practices and help us prepare students more effectively, thus contributing to the value of Question Time as a learning experience.

In order to have the credibility to teach students in a particular discipline, we need to have an understanding of what typically happens in teaching and learning situations in that discipline. To teach students "How to Write a Good Laboratory Report" we have to know what a good Lab Report looks like, how it works, and how readers understand it. The same applies to student presentations. However, teaching students to be good presenters is not just about giving them the experience and applying a sink/swim approach.. We need to help students to make the most of the experience by providing: a) 'How To' sessions, including strategies for improving performance; b) feedback for students on their performance and c) a comprehensible format for the feedback.

We cannot do this unless we understand the particular conventions of the discipline and the genre of the academic talk as given by students. But the typical academic talk is not purely a monologue. Each talk also contains a Question Time at the end in which the presenter must interact with the audience For many students, this Question Time is in fact the most stressful part of the experience. So, if we are to provide students with a comprehensive learning experience when they give a talk, we also need to understand what happens in Question Time.

To date, little research has been conducted using audio or video recordings of Question Time. This is partly explained by the practical difficulty of unobtrusively making good quality recordings of, not only the presenter, but also the members of the audience who ask the questions. The genesis for this paper came from an earlier study of Question Time in which the questions were analysed and categorized according to the level of challenge (Rosse, Prince, & Usher, 2000). Patterns of questioning were identified which showed how lecturers typically develop a sequence of questions by moving from less challenging to more challenging questions. That analysis has been usefully applied to teaching, and both students and lecturers have responded with keen interest (Rosse & Prince, 2001). However the notion of challenge which forms the basis of that analysis is restricted to the content of the question and does not take into account the listener's ability to answer the question. There is still

much to learn about what happens when the difficult questions are asked. In the current study, a qualitative study, the author uses a discourse analysis approach from the field of applied linguistics to shed some light on these interactions.

Method

Patricipants

The data for this study is the same data that was used in the earlier study which focussed on the nature of the questions in Question Time (Rosse et al., 2000). The 18 student participants were all final year undergraduate Electronic Engineering students, aged between 22 and 34 years old. They included both 'local' Australian students and students from non English-speaking backgrounds. There were 17 male students and 1 female student, a gender distribution not uncommon in Australian engineering courses. The 18 students were part of a cohort of 35 students who gave progress talks about their individual, year-long Electronic Engineering Projects. These progress talks, the 'Mid Year talks', were spread across the last week of first semester. The talks were grouped into sessions according to the field of study of the students' projects, and the 18 student talks came from four such sessions.

Data collection

Nine teaching staff, all male, from a department of engineering, were present for the four sessions used in this study. The staff included one Professor, one Associate Professor, three Senior Lecturers, two Lecturers, two Associate Lecturers and one Laboratory Manager. The term 'lecturer' will be used to refer to all nine. Lecturers were scheduled to attend those sessions which related to their field of expertise. Students mostly attended just their own session, plus perhaps one or two in which a friend was presenting. In each session there was an average of 10 students and 5 lecturers, including one lecturer having been assigned the role of Chair.

The four sessions were video-recorded in their entirety, with an accompanying audio recording of Question Time to ensure that the questions were captured. Total recording time for the 18 Question Times was 91.5 mins, with an average length of Question Time per student of 5 mins. The transcription was done from a combination of the video and audio recordings, with a resulting corpus of approximately 13,000 words, containing 261 questions or parts of questions.

Methodology

A blended approach

The discourse-based approach for this study draws on principles of Conversation Analysis (CA) and genre analysis, along with some minor influences from corpus linguistics. In CA, the 'turn' is the basic unit of organisation of the speech event, and a turn is defined simply as "everything the current speaker says before the next speaker takes over" (Stenstrom, 1994, p. 4). But in the study of the subgenre of Question Time, it is helpful to have a unit of analysis *above* the level of the turn because most interactions continue on the same topic or concern for more than two turns, i.e. more than just a lecturer's single question followed by a student's single response. Interactions typically consist of a series of questions and answers, with the questions being asked mostly by one questioner (with other lecturers sometimes joining in) until the questioner has gone as far as he wishes to go to explore the particular concern, or, until he is stopped by the intervention of the Chair. A unit of analysis is useful to capture such a sequence of questions and answers. The term 'Question Sequence' (QS) is adopted for this purpose.

The transcription conventions are a subset (see Appendix) of the symbols from the Transcription Conventions developed for the Michigan Corpus of Academic Spoken English (MICASE) (Simpson, Briggs, Ovens, & Swales, 2000).

Selection and display of data

The selection of excerpts for this paper started with an initial identification of 'difficult to answer' questions. The judgement of 'difficult to answer' was based on:

- the content of the student's response, including pauses;

- the content of the speech of the person who responded to the student's response (including the lecturer who started the sequence of questioning, another lecturer, or the Chair)

And in one case, an excerpt was identified as <u>potentially</u> difficult to answer on the basis of the content of the question, using the concept of level of challenge (Rosse & Prince, 2001).

Once the 'difficult to answer' Question Sequences were identified in the data, the final set of seven excerpts was chosen for analysis in this paper (including the last mentioned excerpt). These excerpts are ones in which students and lecturers find ways to deal with the questions so that problems are raised and discussed with a minimum of loss of face for the students.

Results

Seven excerpts are presented here to exemplify some of the things that happen when difficult questions arise. In the first three excerpts, the primary focus is on the lecturers; in the remaining four excerpts, the primary focus is on the students. This grouping is also used in the discussion.

Focus on lecturers

Excerpt 1 Lecturers getting the student to see the problem

The student in this excerpt had the longest Question Times of all, 16 mins 50 secs (cf. mean duration = 5 mins 4 secs). However the Question Time for all three talks in this session were particularly long (mean duration = 12 mins 12 secs). This excerpt is the opening Question Sequence for this student; it is also his longest Question Sequence in terms of the number of turns.

The lecturer starts by identifying the specific material of interest (the circuit diagram) and then opens it up for the student to show what he knows (Turn 1). L1 frames the instruction as a 'Yes-No question' and uses the polite "could you …?" which the student responds to (in Turn 2) with the formal "yes, I will" rather than a more informal "okay" or "yeah, sure". Although the lecturer has used a 'Yes-No question', which gramatically offers a choice of a "yes" or "no" response, it is unlikely that any student would say "no" in this situation.

Before the student has finished his polite reply, the lecturer overlaps with the student (in Turn 3) and provides some structure for the student with an explicit instruction of what to cover.

1	L1	**that circuit diagram you just showed,** **could you walk us through how it works?**
2	S15	yes, I <will>
3	L1	**<and> tell us yourself what the various devices are?**
4	S15	the second circuit diagram?
5	L6	**appendix 2**
6	L1	**correct**
7	S15	appendix 2. OK, this um current source that I'm using is actually um an infra red detector and we all know infra red detectors they produce a current. at this stage I'm using a linear technology er 11-78 um amplifier, op amp circuit. the reason is because it's commonly used for er, remote control applications.…… …………………………………………………… …………………[6 Lines, 104 words omitted]…………………….………………… ………………., so I had to limit the signal at there. over here these two are basically [can you] um
8	L1	**can you go back to that limiting? [mm]** **um which_ when say you get a high voltage that's going to be limited by the diodes,** **[yeah] what are the diodes gonna look like with the output of that op amp? … [ah]** **when they're turned on?**
9	S15	when they're turned on?[yeah] all they're gonna do if er, if the op amp, if the output of the op amp goes above .7 volts, [mm mm] they're going to um feed it back to the ground so
10	L1	**so the op amp is going to feed it to the ground (XX)**

11	S15	no it's not er, it's going to be um, limited to .7 volts. it's not going to_ these are not allowing it to go over .7 volts.
12	**L1**	**yes, and what's that op amp going to try and do internally to try and get it above .7 volts?**
13	S15	er, I'm not 100% sure to be honest
14	**L6**	**I I I think L1's getting at the question of, if the amplifier's producing a certain voltage and you've only got .7 in the output then you've got a conflict there [XX XX]]**
15	**L1**	**You can (XX) separate them otherwise the op amp's going to try and drive as much current as it can**
16	S15	ah, OK. yeah yeah

Before the student starts, he checks which circuit diagram he should explain, at which point (Turn 4), another lecturer, L6, steps in to clarify. L1 confirms and then the student gets started, using the cue from L6 ("Appendix 2") as the opening for his explanation. The student proceeds to give a lengthy explanation (1 min 20 secs) until L1 interrupts in Turn 8 to raise a problem. This is an important point in the interaction.

Between Turns 8 and 13, L1 engages the student by asking questions which require the student to consider 'what will happen when …?' In Turn 10, the lecturer tries to build on the student's attempt, using the student's understanding and language. And in Turn 12, the lecturer starts with the positive acknowledgment of "yes" and then asks another question to build on that understanding. Despite L1's efforts, at the end of this exchange between L1 and the student, the student admits his uncertainty, and the other lecturer, L6, steps in to try and help the student (Turn 14). Instead of the student taking up the challenge, it is L1 who responds. Interestingly, the student then brings the Question Sequence to a close when he states that he understands (Turn 16).

Excerpt 2   The chair and the supervisor playing their respective roles

This excerpt is right at the end of the Question Time for this student. In the preceding questions, the student was asked to elaborate on what he had done and to justify his design decisions. He gave some quite lengthy responses to these questions. The questions came from two different lecturers: first, one lecturer asked about the fundamental design of the hardware and then a different lecturer asked a series of questions about the circuit. The question immediately preceding this excerpt was a two-part "Why?" question about the circuit. The student began by answering the second part of the question; then he asked the lecturer "and, sorry, what was your other question you were saying?"

1	L2	**common mode. what've you done to, um, make sure that the common mode voltage doesn't exceed the input levels of the, um, instrumentation amplifier?**
2	S 2	um <Pause: 5secs> that's a good question. um, that's …
3	**Chair**	**if you haven't got an answer we might move on**
4	**L7 Spvr**	**I think, I think your your circuit's a little bit misleading, because it looks like the inputs. perhaps you want to talk a bit about those electrodes, cause it looks like you're suggesting you put in a positive and negative voltage on the electrodes the way you've drawn it. you've got V in minus and V in**
5	S 2	oh. yeah oh yeah um
6	**L4**	**they're just passive are they?**
7	**L7 Spvr**	**yeah, they're just conductive rubber straps.**
8	S 2	um, is that, is that what you're sort of er wandering about?
9	**Chair**	**I think this is one to pursue with the supervisor and co-supervisor later, thank you very much S2**

In Turn 1, the lecturer, L2, identifies the problem and asks the student what he is going to do to avoid it. The student's response in Turn 2 consists of a filler, a noticeably long pause, an acknowledgement of the difficulty of the question, another filler, and finishes with an unsuccessful attempt to keep

talking: "that's …" followed by silence. This is when the Chair steps in with a judgement that the student cannot answer it – and a reminder of the need to keep moving. However, at this point the supervisor, L7, steps in with a number of different strategies: he identifies where the problem might be and uses tentative language to encourage the student to say something about the charge on the electrodes. But, without pausing for the student to take his turn, L7 immediately gives even more detail about what exactly the student should notice. Before the student has time to respond (apart from the "oh yeah" utterance), another lecturer, L4, asks a clarification question to which L7 replies. Even though the student has had little to say so far, he is the one who checks back with the lecturer, L2, who raised the original question, back in Turn 1.

Finally, the Chair in his second attempt, brings this interaction (and the Question Time for this student) to a close. This time, the comment is about the importance of the problem, and the role of the student to follow this up with both the supervisor and co-supervisor.

Excerpt 3   Lecturer saying "I can't remember"

The lecturer starts with a short question in which he simply asks for some detail. It is the 10th question of 13 questions in a QT that lasted 10 mins 30 secs. The talk itself had only lasted 3 mins.

1	**L1**	**what sort of feedback is it?**
2	S13	in the um, series series? is that correct? <S13: LAUGH> [well I don't] well it's current sampling voltage feedback
3	**L1**	**well I wanted to know if you'd tried I haven't actually taught that for years so I can't remember if that's right.**
4	S13	who teaches it? well it's current sampling because it's the the resistor samples the current and feeds back the voltage.
5	**L1**	**it's actually the output voltage I think**
6	S13	no it samples the output current. doesn't it?
7	**L1**	**sampling the output voltage I think**
8	**L9**	**looks like it's sampling the output voltage and then it feeds back the current**
9	**L1**	**feeds back the current**
10	S13	oh then it's shunt shunt
11	**L1**	**but I'm not sure**

The student attempts an answer and then immediately asks for evaluation, accompanied by a laugh (Turn 2). The lecturer explains that he is not sure if the student is correct because he, L1, has not taught it for a long time. In Turns 4 to 7, the lecturer and student argue about the question. Then L9 comes into the debate (Turn 8), with L1 affirming L9's comment (Turn 9). The student remains in the interaction with an apparent new understanding (Turn 10), and then L1 finishes off the discussion by re-affirming his uncertainty.

Focus on students

Excerpt 4   Student using pauses, repetition, fillers and reformulations

In this excerpt, the student, S14, is able to answer the first question, but with the second question, the difficulty for the student begins. In his response (Turn 4), he uses "um" to start and also uses it later as unsuccessfully to continue the flow of language. He pauses frequently, repeats words and reformulates.

1	**L3**	**so what about the power source?**
		have you thought about whether it's gonna be self contained?
2	S14	ah yeah it'll be self-contained. it'll probably be a 10 volt or 12 volt flow pack at this stage
3	**L3**	**a flow pack, <u>but</u> [yeah] so it's not, it's not on the vehicle itself?**
4	S14	um … well what I meant by a flow pack probably um …about the size of a um_ <Pause: 4secs> about probably about the height of a cigarette packet and probably about half again as long I think from from what I've seen

5	**L3**	**is this on the vehicle or is this?**
6	S14	yeah, on on the vehicle
7	**L3**	**so it's battery is it?**
8	S14	yep
9	**L3**	**and have you chosen a stepper motor?**
10	S14	um, for for budgetary reasons I_ and the projected weight of the thing I'm pretty sure I can just use old Z motors from … (inch) disc drives motors otherwise it just gets way too expensive.
11	**L3**	**right, so you 've got a chassis planned [um yep] wheels [yep]and how many 3 motors, 4 motors?**
12	S14	um 2 motors, so um turning on the control by just by turning one motor on or the other motor off and it'll give it
13	**L3**	**and how much do you think the whole thing'll end up weighing?**
14	S14	\<Pause: 5secs\> ah, with the with the battery, the battery's, the battery's the main concern there, how much the actual battery weighs the rest of it should should be um fairly light um probably looking at probably about a kilogram maybe a kilogram and a half

In Turn 13, the student is asked to estimate a value that he has not already calculated. There is a long silence of 5 secs (Turn 14) while the student considers the question and, perhaps more importantly, the implied problem. After numerous repetitions, he reformulates the problem (the weight of the power source in relation to the total weight of the vehicle), and then finally proceeds to make a weight estimate to answer the actual question that he was asked. By stating the problem in his own words, the student gives a clear message that he understands the nature of the problem; and.after this response, the same lecturer moves on to a different line of questioning.

Apart from that long pause at the start of the student's response. there are other signs of his difficulty in answering. Starting with a filler like "ah" is very common in conversation and therefore not especially significant. Even in this short excerpt, we can see that the student typically uses fillers like "ah", "um" to start off his responses (Turns 2 ,4, 10 and 12). What is more interesting is his use of repetition inTurn 14: not only does he repeat words and phrases like "with the" "should" and "probably", he also repeats the key word "battery" saying it three times before he formulates the statement.

Excerpt 5   Student taking responsibility

At the start of this excerpt, the student, S13, gives an answer (Turn 2), but since it is only a partial answer, the lecturer is not satisfied and proceeds to point out the problem (Turn 3).

1	**L3**	**where's the output (timer)?**
2	S13	the drain
3	**L3**	**(timer's) not shown**
4	S13	uh?
5	**L3**	**no. the drain's showing but the output's not**
6	S13	oh yeah, sorry. I didn't show that did I? [oh XX] I understand what you're saying.

The student is uncertain and can only make the minimal response of "uh?"(Turn 4). The lecturer then connects the student's partial response with the missing element (Turn 5). Then the student not only acknowledges that he has left out something from his visual (Turn 6), but he also apologises; and he goes on to say quite explicitly that he understands what the lecturer is pointing out. It is noteworthy that the student uses the personal pronouns "I" and "you" in that final turn. After the student's response, a different lecturer starts a new line of questioning.

With the use of "I" there is no doubt that the student is taking responsibility for the missing information. An analysis of the whole of this student's Question Time (with a longer than average duration of 10 ½ mins), reveals that the student uses the first person pronoun ("I") 31 times. So there is ample evidence of him using the first person pronoun, but he does not typically use the second

person pronoun ("you") to address the questioner: in fact, there is only one other instance of this in his 10 minute Question Time.

Excerpt 6   Student using humour as a last resort

The lecturer starts with the question of "how much …?"(Turn 1) but because the student, S14, either does not understand or does not hear the question, the lecturer tries again and reverts to asking about which of last year's projects provided the starting point for the student. Once that is established (Turn 2), the lecturer tries the "how much …?" question again with specific reference to RF transmission (Turn 3). Once again the student has some difficulty answering.

1	**L1**	**OK, how how much work was done on it last year the load that you looked at, [beg pardon]**
		w-what was the project last year that you looked at?
2	S14	um, that was the environmental monitoring unit.
3	**L1**	**OK and how much of the project was there <u>actually</u> in the RF transmission?**
4	S14	um. <Pause: 6secs> it was probably um about a third of the project I'd say. I'm not not really not really that sure how much [OK] how much of that was actually
5	**L1**	**I'm just thinking you may need a lot more time to get that going, than what, I think you've allowed, I think there's a lot of work to go there.**
6	S14	something to scare me in the future isn't it?

After an initial "um" and a 6 sec pause, the student attempts a response (Turn 4), demonstrating uncertainty with terms like "probably, about, not really", and with the use of repetition, "I'm not not really not really". After the lecturer states his concern quite explicitly (Turn 5) with a clear statement of the problem, the student responds with an attempt at black humour (Turn 6). Following the student's comment, the same lecturer turns to a new question – something quite specific to the design.

The Question Time for this student was 9 mins 25 secs (the third longest Question Time of all the talks), and during this time S14 was asked 16 questions by five different lecturers. Of the 16 questions, 4 of them are identified as difficult to answer questions.

Excerpt 7   Student addressing lecturers by name (like peers)

This excerpt begins with the lecturer, L4, making a suggestion which he frames as a question, using the negative form of the verb in "but could<u>n't</u> you"… and the pronoun "you" even though in this case it is the general sense of "you" which both the student and lecturer have been using in the preceding dialogue about systems used in well-known projects.

1	**L4**	**but but couldn't you, from time to time, if you're giving GPS and check it against the GPS or something like that?**
2	S8	that that's exactly what they do <u>L4</u>, and both the vehicles and aircraft they use the ah normally an extended Kalman filter and ah error models and and compare the errors yeah, and er they can integrate any number of inputs.
3	**Chair**	**so who else has got a question?**
4	S8	L2?

In Turn 2, the student can, and does, respond by confirming the worth of the lecturer's suggestion. The student uses the word (adverb) "exactly"to emphasise the match between the lecturer's suggestion and what is happening in the commercial world. Furthermore, and perhaps more significantly, the student uses the lecturer's name (L4); and in fact he uses the lecturer's first name. This is one of only two instances in which a student addresses a lecturer by name in the entire data set. The student continues in this style of address (Turn 4), when he uses another lecturer's first name, L2, to acknowledge that L2 has a question.

Discussion

Focus on lecturers

The analysis highlights a number of features of questioning practices in Question Time. In order to address a potential problem, a variety of approaches can be used. A lecturer can start with an open-ended question which allows the student to structure the response in his own way. A lecturer can also scaffold that type of request by providing some structure for the student, but still with the effect of allowing the student to talk about what they know, before the lecturer zeroes in on the problem. In this paper, the excerpt shows this approach being used right at the start of a student's Question Time. However this was not the only time at which is was used. It was also frequently used later on in Question Time when a new line of questioning was started. In contrast to the "tell me about X …" approach, a lecturer can also choose to start immediately with a direct question seeking a particular item of information.

Regardless of which approach is taken, when a student has difficulty answering, there are a variety of constructive ways of handling the situation. The lecturer who asked the question can work with the student's attempt and try to build on that to develop the student's understanding of the problem. Another lecturer can enter the interaction by either rewording the question, or simply joining in the discussion. The supervisor can step in with a comment to clarify something for the questioner, or to prompt the student to have another attempt at responding. And last but not least, the chair can use his judgement of the situation and step in, perhaps with a suggestion like following up the question later or moving on to the next question.

The role of the Chair at students' progress talks is somewhat different to the Chair at a conference. The chair is normally a lecturer, usually supervising students of his own, and is therefore not just concerned with time-keeping, but also with the needs of the students. In situations where a student is really struggling, the chair can have an important role to play in assisting such students to survive the experience.

Focus on students

The students in these extracts show us a range of behaviours in their responses to difficult questions. When a student is having trouble answering, there might be obvious signs of the difficulty like high frequency use of pauses, repetition, fillers (e.g. "um"), and reformulations of speech. Beyond displaying such symptoms of difficulty, a student might take an active part in the situation by acknowledging the problem and taking responsibility for it, perhaps even apologizing. In the case of the data analysed in this study, the student uses the personal pronouns "I" and "you" which can be interpreted as underscoring the student's engagement with the process.

Another way of responding to a difficult situation is through the use of humour. In the excerpt chosen for this paper, the student uses humour to add to what would have otherwise been the end of a sequence of questioning by the lecturer in which the lecturer identifies the lack of progress by the student. So, in the end, the student manages to have the last word on that topic.

The final point of discussion is the choice that a student makes in addressing the lecturers. Although these progress talks are less formal than the end of year talks, they are still part of an organised event with a certain level of formality which can be seen in the scheduling, the venue, and most students' grooming. So, in many respects, the event is clearly different from a conversation in a lab between a student, a supervisor and some other lecturers. Even if the topic is the same, the language can be quite different. One example of this is the form of address. In this department, students are commonly heard to use their lecturers' first names in daily interactions, especially at this stage of their studies. However, in the more formal setting of a talk, the data for this cohort shows that the clearly preferred option is to not use the lecturers' names at all. Out of 18 students, only one student addresses a lecturer by name, and does so just twice, the first time in response to a potentially difficult question and the second time immediately after dealing with that question.

Concluding Remarks

The methodology employed in this paper is unlikely to be familiar to engineering educators. Even within the field of applied linguistics, there are critics of this methodology who would ask "what can be learnt from putting such a small number of excerpts under the microscope?" The aim for this paper was to select excerpts that would a) reflect the variety of interactions that typically take place in this department and b) be recognisable to educators in similar settings. By doing a fine-grained analysis of these interactions, some of the detail which has been revealed will hopefully be of interest to educators and, importantly, will form the basis for future research in this new area of enquiry.

Asking difficult questions is a valuable part of the learning process. In some cases, the difficult question can make an important contribution to the direction of an already nicely-progressing project. In other cases, the difficult questions have to be asked in order to motivate and guide a struggling student. Whatever the situation, it is worth reflecting on how we go about it, and to notice how students respond.

Acknowledgements

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Appendix

Transcription Conventions

n.b. bold text used for lecturers' speech

n.b. shaded sections to indicate particular segments of interest

The following transcription conventions are from the MICASE Transcription Conventions (Simpson, Briggs, Ovens, & Swales, 2000):

1. Pauses of 4 secs. or longer are timed to the nearest second e.g. <P: 05>. Comma indicates a brief (1-2 sec) mid-utterance pause with non-phrase-final intonation contour. Period indicates a brief pause accompanied by an utterance final (falling) intonation contour; not used in a syntactic sense to indicate complete sentences. Ellipses (…) indicate a pause of 2-3 secs.

2. All laughter is marked <LAUGH>. Speaker ID not marked if current speaker laughs.

3. Truncated or cut-off words have a hyphen at the end of the last audible sound/letter.

4. 2 XXs in parentheses indicate one or more words unintelligible. Words surrounded by parentheses indicate the transcription is uncertain.

5. Only proper nouns are capitalized (in addition to acronyms). The beginnings of turns are not capitalized.

Two conventions used in this study that are different to the MICASE conventions are that *I* is routinely capitalized and that overlaps (both embedded within one speaker's turn and at the changing of turns) are simply marked with square brackets (different font colors are not used here as in MICASE).