Mutual adaptation in parent-child interaction

Learning how to produce questions and answers

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During the early years a young child gradually becomes a member of a culture by learning how to understand and then produce relevant social practices – particularly through interaction in conversation. This paper examines how one child adapts to the practices surrounding the production of questions and answers. Adopting a longitudinal case-study approach and employing conversation analysis, consideration is given to the question-answer practices this child produces during asymmetric conversations across the period when she is acquiring conversational skills (from 12 months to 3 years 7 months). Through a micro-analytic examination of extract examples across this period, it becomes clear that although initially a child can learn the format of question-answer sequences, it is not until the third year that some recognition of being accountable for the form of an answer becomes evident. Between the ages of 2 and 3, we observe that this child is called to account for answers that are deemed inappropriate or odd. Concluding comments consider these practices as forms of social adaptation within asymmetric interactive contexts.

Keywords: child-parent-interaction; asymmetric interaction; learning conversational skills

1. Introduction

During infancy and the pre-school years a young child gradually becomes a member of a culture by learning how to understand and engage in relevant social practices – particularly through interaction in conversation with adults. One implicit differentiation between adult-adult and adult-child interaction is that with the latter, the role relationship is asymmetric – i.e. where the adult is said to possess more skills and competencies than the child, and that the child learns from the adults how to acquire the skills needed for appropriate participation. In research focused on understanding how children acquire conversational skills, a number of developmental psychologists and child linguists have

emphasized the significance of social psychological processes for the acquisition of conversational skills. Such work ranges from those who highlight processes of learning within the 'zone of proximal development' (Cole 1980; Vygotsky 1979), work on social interaction formats (Halliday 1975; Bruner 1986) and the significance of social practice for constructions in language development (Tomasello 2005).

Asymmetry in parent-child interaction is not solely dependent upon differences regarding distinct skills children may or may not possess but also rights and responsibilities within particular cultures. Shakespeare (1998) in outlining the idea of 'half-membership' considers the concepts of 'adult' and 'child' not so much as things with an independent existence but as 'collections of conventions which are used to establish and reinforce non-symmetrical relations between grown-ups and children.' (p. 56). Other research within social anthropology and childhood studies document the ways in which children are positioned during parent-child interaction, e.g. O'Reilly (2008) showing that adults are likely to simply ignore children's interruptions in family therapy sessions; de Leon (2007) highlighting how Mayan children's play is designed to contest the age-graded structure of the extended family, and Lu & Huang's (2006) work examining the interruption strategies of Mandarin mother-child conversation.

One particular set of activities that can highlight asymmetric elements of adult-child interaction, are question and answer sequences. The conventions and expectations surrounding the production and recognition of both questions and answers, provides an ideal context for studying central elements of adult-child conversation. Within developmental psychology there has been considerable work on specific forms or types of questions children understand or produce (Ingram & Tyack 1979; French & MacLure 1981; Ginzburg & Kolliakou 2009). Similarly, Anselmi et al. (1986) report that children (aged 20–42 months) responded appropriately to adult queries about 85% of the time and were able to differentiate between general and specific queries. Pan & Snow (1999) suggest that at 20 months children answer or acknowledge only a third of the questions posed by their caregivers, and with regard to request re-formulations, Marcos (1991) highlights the fact that children of 18 months are quite capable of reformulating a request as a function of their mother's response.

Despite these lines of research, there has been less of a conceptual focus on the function of questions in context – what are children and adults doing with them and why are they designed they way they are? Up to the present the only question sequences examined in context-specific fine detail are requests for clarification (Ninio & Snow 1996; Wootton 1997). We know relatively little about how children adapt to conversational contexts when they are expected to begin providing answers.

The focus of this paper is on understanding how a child appropriates the methodic practices surrounding questions and answer sequences common to everyday conversation. The aim in what follows is to describe and examine instances of question-answering displayed by a single child over a two year period when she was learning how to talk. Through doing so, we will be in a better position to understand what is involved in a child learning those practices which lead her to producing both questions and answers, and which exhibit her recognition of the accountable nature of this particular methodic practice. Similar work adopting the sequence-focused fine-detailed methodology of conversation analysis to study children's practices in conversation has been reported by Keel (2011) and Sidnell (2010) on questioning repeats, Wootton (1997, 2007) on requests, and Filippi (2007) examining replies.

Within conversation analysis Sacks (1992),[1] when alluding to the problematic nature of cultural membership for children, noted a sophisticated strategy children often employ when interacting with adults. Children utilize the fact that when somebody is asked an 'open' question, they obtain rights regarding participation and who holds the floor in a conversation. This underpins the common observation that children, given the asymmetric relationship of adult-child, often cannot speak whenever they want to and might employ openers such as 'do you know what, Mummy?' thus initiating the requisite response (from the adult – "What?"). In this way the child guarantees entry into the talk. At what particular age children begin to take advantage of this strategic resource remains unclear and we do not know how they gradually learn to adapt to conversational contexts and begin to use such strategies.

With reference to the production of methodic question-answering practices, Sacks (1992) when discussing what is involved in recognising a question, as a specific practice that requires a response, makes the point that answering according to the project of the question involves a particular skill or competency, presupposed in his comment,

> "what you can see that the question wants to find out, is something that controls how you answer it" (p. 56).[2]

The ability or competence to 'see what the question wants to find out' is an example of a methodic practice that a competent member would not, under most circumstances, explicitly comment on. As with the appropriation of many other conversational actions, *question and answering* as a practice is not something that adults normally draw attention to, and rarely point out that somebody might not be doing it appropriately. Drawing attention to conversation as a reflexively accountable practice is something competent members of a culture would not normally do in explicit ways. However, the asymmetric nature of the adult-child relationship

may prefigure underlying orientations regarding competence and ability, and this may affect the ongoing interaction between them.

Turning to the specifics of what is involved in learning to see the project of a question, we can say that for a child who is learning 'what you can see', 'what there is 'to see", or indeed that there is something 'to see' at all, indicates that having the ability of 'seeing' presupposes knowledge or familiarity with what might constitute an appropriate answer. The examination of the following extracts is focused on addressing the issue, how does a child learn what constitutes questioning and answering? In other words, how does a child learn to recognise the action that has been performed through a question – recognise in this instance meaning displaying their understanding 'of the fact that' they understand the actions that a speaker performs with a question.

1. 1.   The data corpus

The extracts discussed below come from a data corpus that consists of a series of video-recordings (31) of my daughter, Ella, filmed during meal-times as she was interacting with family and occasionally, family friends. The participants described in the extracts are her father, mother, and the child's older sister Eva (8 years old at the beginning of the recordings). The target-child, Ella, was positioned in a high-chair for the camera. The recordings began when Ella was 1 year old continuing until she was 3 years 7 months (at least once each month). The length of the recordings range from 10–45 minutes (average 35) with the total recording amounting to around 11 hours. Transcriptions of all the recordings using conversation analytic conventions were produced (following Psathas 1995) alongside transcription notations relevant for child language analysis (CHILDES, MacWhinney 2007). The transcripts and digitized video-files are linked together using the software facilities of the CLAN suite of programs. The resulting data corpus can be viewed at http://childes.psy.cmu.edu/browser/index.php?url=Eng-UK/Forrester/.

1.2   Research participation and ethics

Care was taken with the video-recordings to ensure issues of participation were dealt with in line with the British Psychological Society's Code of Conduct, Ethical Principles and Guidelines (Section 10.1.1).[3]

2.   Analysis examples

To aid clarity of exposition, the analysis section is divided into three parts; (3.1.) explicating this child's ability to respond appropriately by age 3 years; (3.2.)

highlighting elements that either pre-figure or enhance the emergence of question and answering skills; and (3.3.) where adapting to the conventions surrounding question and answering practices becomes important.

2.1   The realization of question and answering skills

We can begin by considering an example where Ella, around 3 years old, can recognize the project of a question and displays an orientation to the fact that questioning is taking place. This first example can be considered as the end-point of the acquisition process.

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      Extract 1:                                                    Age 3:2
1     F:      have a little read of your book while you're waiting
2             (1.2)
3     F:      miss:::
4             (0.4)
5     F:      is it doctor seuss?
6             (0.4)
7     EL:     ⁰yea⁰
8             (0.9)
9     F:      is he a funny doctor?        (E turns back around and looks at her book)
10            (0.5)
11    EL:     yea
12            (0.9)
13    F:      is he a ↑lion?
14            (0.3)
15    EL:     N↓::↑O
16            (2.2)
17    EL:     he's a person
18            (0.5)
19    F:      a real doctor?
20            (0.5)
21    EL:     yea
22            (2.2)
23    F:      not like in eh what's that other story that we've go::t that's [eh]
24    EL:                                                                    [my day]
25            (0.2)
26    F:      oh my day ↓that's right
27            (3.5)
28    F:      but do you like the my day doctor?
29            (0.6)
30    EL:     yea
31            (1.1)
32    EL:     I like him ↑better
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33          (0.3)
34   F:   →  >crazy< why d'you like him?
35          (0.6)
36   EL:    cause I ↑D:::O (.) ↑don't ask me every (.) ↑ti::↓me=
37   F:    =oh ↑all ri: ↓:ght
38          (1.0)
39   EL:    ⁰↑all ri::ght⁰
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Immediately prior to the interaction, Ella has just indicated that she would like some more toast and (at line 1) the father tells her he will make some more, and suggests she read while she waits. Despite this suggestion however, between lines 5–34 the father then proceeds to ask Ella a series of questions, in fact it turns out from her point of view, too many questions (there are questions at lines 5, 9, 13, 19, 23, 28, 34). On the one hand he is suggesting she read her book but at the same time, starts producing questions designed to keep Ella talking. The questions appear to be relentless and as interaction proceeds there are occasions when the father asks a question very quickly after she has produced an answer to a previous one. By the short minimal answers she gives, Ella seems to be displaying her resistance to answering these questions. This continued asking is very likely related to the fact that the camera has recently been switched on – this parent/researcher is busy making toast but nevertheless may hope to record Ella talking as part of the research project – whereas she is quite happily reading a book and not interested in conversing with him. In effect Ella is exhibiting a kind of dis-preference for engaging in talk.

Around line 36 we find a particularly marked response by Ella that warrants attention. Her turn-at-talk is marked in various ways; her reply to his question 'why do you like him' is noticeably louder [I DO], is stretched, and is followed immediately with a demand that the father stop asking her questions (don't ask me every time). The last part of her utterance is produced with a marked falling/rising intonation on the word 'time' which may indicate some annoyance at what he is doing, or certainly a display that this continued questioning is inappropriate and that it should stop. This particular answer displays that she does not want to engage in a conversation at that moment through the explicit sanctioning of the series of questions he is producing. This utterance draws our attention to Ella being able to display an orientation to the accountable nature of conversation – in this case the asking of questions continuously, and to her subsequent recognition that what he is doing is inappropriate in some way (evident in the lexical content of her final statement).

Whatever else we might say about this child being able to display her recognition of the project of the earlier questions in this sequence (for example at line 17 where she moves to correct his question-suggestion that Dr. Seuss might be

a lion), she possesses the skills, at this age, to object to being asked too many questions. Notice the close interdependence between the production of her reply at line 36 as a social action and the associated ascription of intention in this instance – Ella designs her turn at line 36 both so as to indicate that the topic (discussion of doctors) is now closed, but at the same time she calls the father to account for his repetitive and demanding questioning through the explicit content of her utterance.

In summary, this extract details the kinds of question-answering abilities a child of around 3 years is likely to possess. Furthermore, in conversation analysis it is understood that the phenomenon in conversation of producing formulations [of the fact that our conversational activities are accountably rational] is an essential skill for showing that you have become a full member or participant.[4] Here Ella's 'doing formulating appropriately' is evident in both being able to design her answers with respect to the function of questions and also being able to explicitly refer to the fact that questioning is going on.

2.2 Tracing the emergence of question and answering skills

Having described certain key elements central to possessing the conversational skills of question and answering, we can now trace out how this ability emerges from around the first months of her second year. Consider next, extract 2 recorded when Ella was 1 year 5 months and where she begins to refer to the family cat. The sequence begins after a lengthy pause during which Ella and her father are eating. Following a brief exchange of looks (during line 1), Ella while looking down at her bowl, puts her left arm out, turns her hand indicative of making a gesture and simultaneously produces a sound (line 2). It is interesting that there is no immediate response to this sound and gesture from the father, and then Ella turns towards him and produces a second utterance (line 4). Her turning towards him, looking and changing her utterance, when considered with reference to the immediate sequential implicativeness of next-action, indicates her expectation that what she has done has communicative significance – or at least requires a response of some kind.

	Extract 2:		age: 1:5 (1 year 5 months)
1		(9.2)	
2	EL:	oh all	*(E puts left hand out in gesture)*
3		(1.0)	
4	EL:	du gone	*(E looks at F – repeats gesture)*
5		(0.7)	
6	F:	gone away ?	*(F – simultaneous eyebrow move)*
7		(0.3)	

8   EL: → uh ?   *(moves head to the right)*
9   (0.3)
10 F: that's r↑ight
11   (1.8)
12 F: I haven't seen the pussy tod↓a↑y
13   (0.2)
14 EL: ⁰( ) ( ) xxx⁰

What is noteworthy about what immediately follows is that (at line 10) the father treats Ella's response to his question as an appropriate reply, treating it as if she which could be asking a question (along the lines of her saying 'He's gone away has he?'). Notice that at line 6, he asks a question in response to her statement or assessment, and in doing so simultaneously raises his eyebrows in an, 'as if' questioning gesture. Then, and in reply, Ella produces a sound and gesture that appears to both mimic (gesturally) his action (slight movement to the right) and which possesses a noticeable upward intonation (line 8). In effect, the adult is treating what the child has done with her action – immediately following the question at line 6 – as an answer/statement/question about the family cat. This is a very common practice exhibited by parents around this time. It may well be that the first exposure to 'question-answer' practices, for the child, could be recognizing that something you are doing is treated as if it were a second part to an adjacency pair – treated as an intentional action by the parent (Golinkoff 1983). What this example indicates is that even very brief semiotically recognizable communicative gestures rest on a shared hermeneutic framework between participants. It is hard to envisage how a child becomes 'languaged' without first becoming familiar with, and learning to produce, appropriate sequentially implicative 'next actions'.

Turning to another early example, a recording, approximately three months after the above extract, we find an example where Ella produces an utterance which she appears to have designed as a question. On this occasion her action is treated inappropriately by the father. He produces a response, but it is not an answer.

   Extract 3:   age 1:8
1   (24.7)
2   F: ⁰rounds this somewhere⁰
3   (0.5)
4   F: mm:: good (.) eh
5   (1.5)   *(E stands in chair looking out of the window)*
6   EL: bi:::b   *(possible reference to 'bib' on washing line)*
7   (0.4)
8   F: ↓ba↑by
9   (0.7)
10 EL: ↓ba↑by

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11              (0.3)
12  F:      what's baby having [now] ?
13  EL:  →                    [ma::]::m          (E sustains look out of window)
14              (1.0)
15  EL:  →  mummy ?
16              (0.6)
17  F:      daddy
18              (0.2)
19  EL:  →  MU:::MMY ? =          (E turns and looks towards F)
20  F:      = what's she do::in ?    (F looks up and out of the window)
21  (0.3)
22  EL:      mummy hanging [the xx]    (E looks back towards window)
23  F:                     [hanging] the washing up ?
24              (0.3)
25  EL:      HA:::ni[ng]              (turns again towards F)
26  F:      [ver::y] good
27              (0.5)
28  EL:      bi:: it
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Approximately 10 minutes prior to the beginning of the extract, Ella's mother has gone out to the garden to hang some washing on a clothes-line. At the beginning of the extract, Ella has been watching/looking out of a window (the camera is beside a window which looks onto a garden) and has moved position on her chair, one assumes so as to see what is going on in the garden. While the father is moving around the room, Ella is looking towards the window, stands up and then, around line 6, produces an utterance that sounds something like 'bib'. She appears to be referring to a child's bib being hung on the washing line outside by her mother. However he simply produces a repetition of his own mishearing of '*bib*', saying '*baby*' (line 8), to which Ella herself subsequently responds. This imitative echoing by the father and by Ella is very common in the early recordings.

In the next part of this sequence, he then moves around the kitchen and, using the referent 'baby' form of address asks Ella what she is going to have (to eat) next (line 12). However, since line 6, Ella has maintained a sustained and close interest in looking towards the window- she overlaps part of his question by first saying briefly '*mam*' (line 13), and then produces what appears to be a question ('*mummy*' line 15) – indicated in the rising inflection in the use of the sound. This self-repair may in part result from the fact that both participants are speaking at the same time.

In response to Ella's self-repair at line 15, and as the father moves into a chair alongside Ella at the table, he simply produces a standard relational pair item for this membership category (mummy-daddy), Butler & Fitzgerald (2010). It is at this point we begin to find indications that the child's production of

line 15 is designed either as a question or a statement. Immediately following his 'misinterpretation' at line 17, Ella's next utterance (at line 19) is produced in the form of a second self-repair but now designed to indicate disagreement or at least trouble in the talk. Notice, alongside repeating what she has said, she raises her voice, turns towards the father and makes eye-contact (all at line 19). Further indication that he recognizes there is trouble in the talk is indicated in the manner of his response (the fast uptake) and immediately asking Ella what her mother is doing in the garden. A close examination of the video recording indicates that as he moves to sit down during Ella's utterance at line 19, he looks at the window and towards the garden, thus displaying a co-orientation to the child's point of interest.

The parent's questioning repeat at line 20 serves to take up the child's utterance as possibly a question but certainly a statement of some form and possibly the introduction of a topic (Keel 2011). In this extract what we have is Ella showing an orientation to an answer (his response at line17) that she treats as not good enough, incomplete or inappropriate. With reference to identifying the specifics of the action underpinning her question (or statement) while this could be an assessment or request for information, in practice it seems to be designed for engagement purposes – i.e. so that she can take the floor or make a comment (line 22), and thus extend the interaction.

In extract 2 and 3, while there are indications that Ella displays an orientation to the form and sequence of question-answer sequences, and that her parent treats some of her earliest response and actions 'as if' they are indeed answers to questions, in the following extract, recorded approximately a month after extract 3, we find a clear indication of her monitoring how an answer she produces is taken up by the questioner. A few months later, when Ella is around 2 years, we find an example where she exhibits the skills necessary to produce particular question formats (*why*) but may not yet be at the point where she can re-design questions when her co-participant appears not to understand. In this next extract, Ella is trying to obtain information from her co-participant about a noise she can hear in the kitchen, the sound of a kettle beginning to boil. This recording begins at a point when the father has just sat down at the table.

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    Extract 4:                                          age 2:1
1               (11.1)        (F looks towards E, E to F, E begins pointing gesture)
2   EL:    sh::::a bar
3               (0.4)
4   EL:  →  w[hat] dat ?              (E points in different direction)
5   F:     [eh]
6               (.)
7   F:     w[hat darlin]g?
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8    EL:        [⁰noi::s⁰]
9               (0.2)
10   EL:   →    what dat no::ise ?
11              (0.6)                            (F turns and looks)
12   F:         k[ettle]
13   EL:        [⁰noi::⁰]
14              (0.5)
15   EL:   →    why ?                            (E looking at table)
16   (0.2)
17   F:         I'm making a cup of te::a
18              (1.1)
19   EL:        keto
20              (0.6)
21   EL:   →    whas dat ?                       (points towards the noise)
22              (1.2)
23   F:         what ?
24              (0.3)              (F looks first one way then the other towards noise)
25   EL:        kett::le =
26   F:         = kettle noise (.) over there            (E lowers arm)
27              (0.6)
28   F:         can you hear a noise ?
29              (0.2)
30   EL:        ((nod))
31              (0.6)
32   F:         sshh
33              (4.2)
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Immediately after sitting, the father turns towards Ella who, looking towards the camera and pointing at an object on the table and near the camera, produces an utterance (line 1). This seems to be a request for information and it transpires that she is trying to locate the source of a sound she is beginning to hear.[5] It is not clear whether this initial utterance is a statement, a question or an attempt at introducing a topic. In response the father turns and looks toward the direction Ella is indicating, then turns back towards her, begins to respond, but as he is doing so, Ella (line 4) asks a question and points in a different direction to the one previously indicated.

While she is asking this question (which extends from lines 4 to 8), the father produces a clarification request – eliciting a repair (line 10) by Ella. This utterance is in effect a repetition of what she has already said – but now clarifying what the '*that*' she referred to earlier in line 4 is (the noise). While he is replying (line 12) Ella quietly repeats the end of her own previous utterance (*noi*) that could be an attempt to re-initiate the question. Following his response at line 12 (*kettle*), she

then produces a question at line 15 (*why?*) which is answered in a manner that does not appear to address the project the question is designed for, i.e. it is not clear to the father what the question might mean.

At line 17, he produces an answer which appears to treat Ella's utterance as if she had asked him a question of the form 'why is the kettle on?' Leaving aside another instance of sound repetition Ella then exhibits at line 19, she then asks again the questions previously asked at line 4 and line 10 (*what's dat*?). Some indication of the trouble this further question then causes, on a topic that for her co-participant has already been answered, is evident at line 23–25. Here, he not only asks her to clarify what she might be referring to, but in addition looks first in one direction (to the child's left) and then turns 180^0 towards the source of the noise. The father then goes on to treat her question (of line 21) as if she is making a statement about the kettle – utilizing the fact that she again repeats '*kettle*', immediately taking up and clarifying this reference (line 26). With this specific response the child drops her pointing gesture (which has been sustained from around line21). Simultaneously, as the noise of the kettle increases (around line 24) the child becomes noticeably stiller – and the father appears to treat her actions (her attending) as 'doing listening' in some fashion – evident in his question at line 28 and the following suggestion for quiet (line 32).

One way of interpreting what is going on here is that in effect, she is trying to formulate a question something along the lines of 'Why does the kettle make that sound' (at line 15) – and it seems as though it is the sound that attracts her attention in the first place. However, at this age she doesn't possess the skills (at line 21) for reformulating her questions to something like 'why do kettles make that noise?' – and can only repeat the formulaic practice '*was dat*'? In other words she appears quite capable of producing a question format but cannot reformulate so as to produce a question that would make more explicit what the project of her original question was. This extract example represents a very common situation for parents interacting with young children learning how to talk – they produce inappropriate or ill-formed utterances but do so with actions indicative of marked intentionality – presenting adults with the puzzle 'what does this child mean? ' (Golinkoff 1983; Kidwell & Zimmerman 2007). This serves to remind us that it is not just the child who is adapting to the changing demands of the conversational context, but also the adult adapting to the developing child. In this brief examination of the emergence of question and answer conversational skills, we find that first of all adults seem to be treating utterances as 'questions' (extract 2), then that this child is displaying an orientation to whether her own questions have resulted in answers (extract 3), and finally that the child is able to produce an appropriate lexical format for questions (extract 4), yet not quite being able to adapt, and reformulate, when necessary.

2.3 Adapting to the conventions and practices of questions and answers

In this third analysis section we move to a consideration of circumstances which may help engender the acquisition of question and answer conversational skills, particularly how a child may have to adapt to changing expectations from those around her. Here, and between the ages of 2:5 and 2:8 months we find Ella's co-participants beginning to call her to account for her answers to questions, showing considerable interest when they are inappropriate in some way. We can turn first to extract 5 and an instance where her answer is taken up or treated as inappropriate. Here, Ella, her father and older sister (aged 10) are eating at the breakfast table. Immediately prior to the interaction described here, there has been discussion about the pre-school nursery that Ella attended, one her sister also went to.

At the beginning of the extract Eva is referring to a photograph of her with her arm in a sling commenting that it was around that time she attended nursery (called the annexe). Around line 10, the father asks Eva what age she was at that time, to which she replies with a sound and head-nod. During this interchange, Ella has been looking towards Eva and after a short pause produces an utterance that can be glossed as 'I went when I was four' (line 14 – she is likely to be referring to the nursery and making a statement about when she first attended). As she finishes speaking the father produce a clarification question, to which she replies (line 17), but now correcting what she has said (other-initiated self-repair) and instead asserting that she went when she was three (line 17).

	Extract 5:		age 2:5
		*Ev = Ella's sister – age 10	
1	*EV:	em but =	
2	F:	= cat [called flanny]	
3	EV:	[but (.) you know] when I had my arm in bandage?	
4		(0.2)	
5	F:	oh ↓yea =	
6	EV:	= I was in annexe then	
7		(0.4)	
8	F:	a::w right	
9		(0.3)	
10	F:	that's when you were (.) four ?	
11		(0.2)	
12	EV:	mmhhmm *(Eva head nod + gaze to F – Ella look at Eva)*	
13		(1.6)	
14	EL:	↑I went en four [ent]	
15	F:	[>did you when<] when you were four ?	
16		(0.2)	
17	EL:	no (.) went (.) three *(Eva looking at Ella; Ella looks towards F)*	

18   (0.2)
19   F: when you were ↓three
20   (0.1)
21   EV: not even three y(h)et
22   (0.6)
23   F: you'll be [three] on your next birthday won't you ?
24   EL: [⁰four⁰]   *(Ella looking at F)*
25   (1.3)
26   EL: → no (.) I'm four   *(Ella touches stomach: Eva looks at Ella)*
27   (0.2)
28   F: are you four now ?   *(Eva begins laughing)*
29   (0.3)   *(Ella looks past F – no response)*
30   F: [very good]
31   EV: [(*laugh*)] (*bangs the table*)
32   (1)
33   EL: ↑⁰I'm not four⁰
34   (0.3)
35   EV: are you ten ?
36   (0.6)
37   EL: → ↑what me ? = *(touches own body looks towards EV)*
38   F: = your ↑tw::o Ella
39   (0.3)
40   EL: I'm tw[::o ( ) x( ) xxxx] *(opens arms and begins to move)*
41   F: [tw::o that's very clever]

It is this statement that her sister then produces a comment on – (line 21) point-
ing out that she has not yet reached that age (doing so with some indication of
amusement in her voice). At this point the father displays an orientation to Eva's
comments, and the possibly challenging nature of what was said, by suggesting
that her statement regarding being three is more or less correct. This potentially
face-saving suggestion by the father is both asking and telling her that she will be
three on her next birthday. In other words, his recognition of her inappropriate
answer and her sister's amusement at what she is asserting serves to initiate the
suggestion he makes at line 23. It is interesting that as the father says this, Ella very
quietly says '*four*' (as if to herself) and continues to look towards him across lines
23–24. Ella does not appear to recognize his repair initiation, and disagrees with
this suggestion, instead asserting that she is (not three) but four (line 26). While
she is saying this, and in fact before she begins to speak (respond to his question)
her sister has turned and is looking towards her (as if to monitor closely what
she is going to say – from around line 25). Immediately afterwards, at line 28, the
father then asks her to clarify her statement, and on not getting a response (notice
at line 29 Ella appears to be looking past him and doing nothing), he then simply

produces an agreement token (line 30). His response in effect treats Ella's non-response as a confirmation.

At the same moment the father says this, Ella's sister Eva then produces a pronounced laugh, bangs the table repeatedly and displays considerable amusement at Ella's answer at line 26, and possibly also, at her not taking up the opportunity to change or alter what she has just said. Immediately afterwards, Ella then says quite quietly that she is not four (line 33), which seems to be a response to how her original answer has been oriented to by her sister. At this point Eva, taking up the opportunity to play with the incongruity of Ella's comments, then asks her directly (line 35) whether she might be aged ten years. What happens next is interesting with respect to the significance of self-positioning and face-saving for children around this age (Gerholm 2011). Ella opens her arms, asks what age she is turning, looking towards her sister, and on finishing speaking touches her stomach and folds her arms (line 37 – *what me*?). It is the father who responds, explicitly using her name – and with accompanying emphasis. To this answer, Ella then comments making additional noises and moving up and down.

What seems significant in this interaction is the role of the social other. Her sister begins first with a short laugh (line 21), then cannot contain her laughter and amusement at Ella's answer (line 31) and then by line 35 is asking if she might be as old as ten years. What we can see however is Ella displaying an orientation to the trouble in the talk and explicitly seeking assistance so as to produce an appropriate answer. Her question at line 37 indicates her own understanding that her answer is somehow incorrect or worthy of comment. It may be the case that the child recognizes there is a problem but cannot adapt to the demands being made.

Around the same time, we find another occasion where the fact that Ella does not seem to see that the project of the question elicits marked reactions from those around her. She does not understand why repair is initiated and her answers become a trouble source in the talk. At the time of this extract Ella has finished eating, is sitting near her sister and various topics have been discussed – mostly around the subject of Ella's nursery (again). A few days earlier a girl at this preschool had invited Ella to a party. The interaction opens at a point where her older sister (Eva) and the father are talking, and while doing so (at line 2), Ella works to introduce a topic and produces an extended statement about somebody she knows (a girl called Mary White). This appears to involve considerable effort – she has to raise her voice considerably, repeat what she is trying to say, and she finishes her contribution by turning and looking at her father around line 6.

Extract 6:   age 2:5
1   EV: no you with(h)out [pyja(h)mas]=
2   EL: [MI::NE E WHi::te]
3   (0.4)

4	EL:	got free aEL::ee	
5		(0.3)	
6	EL:	cone↓:: ↑s	*(E turns and looks at F on finishing)*
7		(1.0)	
8	F:	mary white's got three eighty cones?=	
9	EL:	=⁰yea⁰	
10		(0.3)	
11	F:	well [what]	
12	EV:	[no] no ice-creams *(laugh)*	
13		(0.5)	
14	F:	who's mary white ?	*(E continues to look towards F)*
15		(1.7)	
16	EL:	⁰ice creams⁰=	
17	EV:	=that girl who invited her to her pa::rty	
18		(0.6)	
19	EL:	her ↑I:: ceam =	*(Eva looking at Ella)*
20	F:	= oh did she like ice creams ?	
21		(0.5)	
22	EL:	yea	
23		(0.9)	
24	EL:	⁰for xxx xxxx⁰	*(unintelligible)*
25		(0.6)	
26	F:	is her name may white ?	
27		(0.4)	
28	EL:	yea	
29		(0.2)	
30	F:	oh ↑I didn't know that	
31		(0.5)	
32	F:	>how do how< how do you know that ?	
33		(0.9)	
34	EL:	⁰oh may nay⁰ *(pulls table-cover over her body up to her chin)*	
35		(0.5) *(Eva stops eating and looks at Ella who returns gaze)*	
36	EV: →	oh because you (.) are you friends with her ?	
37		(0.7)	
38	EL:	⁰no⁰ *(looks away from EV and still holding cloth)*	
39	(0.4)		
40	EV:	no *(laugh)* *(turns towards F smiling)*	
41		(0.1)	
42	F:	*(ha ha ha)* this stray kid's been >invited to the party<	

We then find Ella being asked a clarification request repeating in part what she has just said (line 8). This she replies to quietly, without repairing what she has said (and the father mis-hears what she has said) and at the point where it seems that he is about to comment on this (line 11) her sister interrupts (indicated by the use of

'*no*' in line 12), and clarifies what Ella has originally said (in effect, Mary White's got ice-cream cones – not three eighty cones). We then find another question-answer sequence, now focused on name of the girl Ella referred to (line 14). Indications that this question may be potentially troublesome for Ella are evident in the relatively long pause and her simply replying (quietly) with a repetition of the earlier answer her sister provided about the ice-cream. Immediately on finishing her answer, Ella's sister indicates whom Ella has been talking about (somebody who was referred to earlier when discussing Ella's invitation – note the emphasis on *that*). Ella's conversation monitoring skills are evident here in that she extends what Eva says at line 17, this time making it clear what it was she was saying about this person. The pitch change as she utters '*her ice-cream*' at line 19 is designed to indicate the completion of her statement, which may indicate Ella's orientation to the fact that her earlier comment across lines 2–6 has been misheard. Evidence for the father's own recognition of his mishearing can be seen in the 'oh' prefacing produced at line 20, immediately prior to the production of a clarification request that displays an alignment with the original statement.

Then, around line 26 the father then asks another question this time designed with emphasis on the pronominal '*May*', to which Ella replies in the affirmative (it would seem this is designed as an embedded correction regarding Ella's mispronunciation when originally mentioning this child's name – see Jefferson 1983). Again, however and alongside indicating surprise (the oh-preface at line 30) he then says he did not know that the child who had invited Ella to her party was named '*Mary*'. The father's next question (line 32) is somewhat curious in that at this age, adults rarely ask children to provide an account of how they have come to know somebody's name (Robinson 1992). Indications of the potential trouble surrounding this question is evident in both the manner of the asking, Ella's response and Eva's attempt at providing a possible explanation for Ella. This specific calling to account regarding what Ella might or might not know, and why she might know it, is infrequent in this data corpus. Some indication of the father's recognition of the potential trouble a question of this form might initiate could be evident in the slight stutter, his repair and the emphasis on the sound *how* (line 32). Certainly, Ella's immediate response seems to mark out the difficulty she has with this question – she looks away from the father, pulls the table-cover up to her chin, and quietly repeats the name '*May*'.

What happens next is quite striking. Ella's sister turns towards her (and Ella towards Eva) and produces the first part of her utterance at line 36. Ella then returns her gaze (lines 35–36). It would seem Eva is about to produce a statement explaining why Ella might know (this child's name). However, she stops short, and instead asks Ella if she is friendly with this child. Ella's negative reply (line 38) occasions laughter from her sister and father, and he then produces a statement

about the incongruity of being invited to a party by somebody you're not friends with (line 42). This occasion of being called to account is marked in that Ella seems to be retreating from the interaction – covering herself with the tablecloth; she produces a quiet sound imitative or repeating the name which seems to be the source of the trouble (line 34 – *May*); her sister works to assist her in providing an answer which would indicate understanding the action the question is designed to elicit (explain how you know), and both her father and sister exhibit amusement at her unexpected answer. The reactions of Ella's co-participants display something of the expectations of adults, or fully competent speakers towards less competent ones. Such instances remind us of the asymmetric nature of early adult-child interaction.

In this section we have seen the kind of circumstances within which a child learns what seems to underpin question and answer sequences. In both extracts, and in different ways, the kind of answers that Ella produces which previously would not have been remarked on or drawn attention to, have become something noticeable, remark-able and oriented to quite specifically by those around her.

3.　Concluding comments

Being able to recognize the actions that a speaker performs with a question is a competence or skill that this child, by the age of around three years, now possesses. In the first example, Ella exhibits or displays some recognition of what a project of a question might be, and indeed can draw attention to the accountable nature of using questions just for the sake of asking (Extract 1). Other extracts have helped document the subtle difference between a child being able to recognize that a question is a particular kind of formulation that requires a response (of some kind), and the form that response should take. We noted in extract 4 that a child at age 2 years might be able to produce the correct format of questioning, but not quite have the skill to transform these formats in circumstances where their addressee appears not to understand the action the question is designed for.

In mapping out and describing the emergence of questioning and answering we are asking how we understand those events, situations, experiences which have a consequential bearing on how children learn members' methods (question-answer routines; repair procedures; formulations and other related conversational actions). How does a child learn to adapt to the changing circumstances of the conversational contexts s/he finds him/herself in? Here it would seem, and with particular reference to extracts 5 and 6, that participation itself, once a child has reached a certain age, makes demands of a kind that do not seem to be in place when the child is younger. Between the ages of 2 and 3, we observed that

Ella is now being called to account for the fact that her answers are, on occasion, inappropriate or odd. If it becomes apparent during this time that a child does not appear to 'see the project of the question' and design their answer in accordance with whatever that project might be, then this itself is something that others notice, and point out and comment on. It could well be the case that it is significant moments of this kind, that lead the child to what we might want to call 'awareness of self-awareness'. Recently, Gerholm (2011) makes the point that disclosing misconceptions regard on-going understandings during talk is a particularly sensitive face-threatening context for young children. Such situations are likely to involve asymmetric role relations between participants. What is interesting, in light of the above, is that for this child by aged three years, the actions that make question and answer sequences realizable are reflexively accountable practices – (e.g. extract 1). Prior to this, the nature of competency is something that can elicit explicit remarks by others (e.g. extracts 5 & 6). It may be the case that it is the very asymmetrical nature of such encounters that helps engender the skills a child requires.

Notwithstanding the constraints on what might be drawn from this single case study, some reflection on the complex nature of the relationship between asymmetric social relations and question-answer practices may help locate the research reported above. Contemporary work in both linguistics and conversation analysis document the challenges in establishing how asymmetric relations may bear upon interaction in context for adult-adult question and answer routines (Heritage 2002; Gardner 2010; Heinemann 2010; Stokoe & Edwards 2010). Recently Freed & Ehrlich (2010) make the point that no single linguistic factor can determine whether or not a particular utterance is 'doing questioning' in context, calling for consideration of both functional and sequential aspects of talk. Conversation analytic studies can certainly help highlight something of the fine detail of what might constitute question and answering as far as the participants themselves are concerned, and the extracts explicated above indicate something of the subtle processes involved during everyday adult-child asymmetric interaction.

By definition the nature of adult-child interaction presupposes asymmetry, that is, in the sense that one is said to be more advanced, developed or competent than the other. We noted in some of the extracts above that during the learning process of interactional skills, it is not only the child who "learns" more, but also the other, adult participants who are treating her differently possibly because of her age. In other words, adults (or "fully competent" participants) display different and gradually changing orientations to the "learning" participant, orienting to the child as being more or less able to answer appropriately, or to account for her actions. So, with respect to the significance of the interdependence of learning conversational skills and asymmetric role relations, future work might address the question of when and why do adults begin to call the children to account for

their actions? The extracts explicated above indicate something of the subtle processes involved during everyday adult-child asymmetric interaction. Learning to see what a question wants to find out (the project of a question) will indeed involve acquiring the necessary skills for designing appropriate answers, but it may also involve learning when not to ask certain kinds of questions at all.

Transcription Conventions (CA)

Sign	Meaning	Sign	Meaning
↑ or ↓	Marked rise (or fall) in intonation	:::	Sounds that are stretched or drawn out
<u>Underlining</u>	Used for emphasis	[ ]	Overlaps, cases of simultaneous speech or interruptions.
UPPER-CASE LETTERS	Indicate increased volume (note this can be combined with underlining)	^{0} word ^{0}	Shown when a passage of talk is noticeably quieter than the surrounding talk
.hhh	A row of h's with a dot in front of it indicates an inbreath. Without dot an outbreath	=	No pause between different speakers
(comment)	Analyst's comment about talk	(.)	Small pauses
> word <	Noticeably faster speech.	⟨word⟩	Noticeable slower speech
?	Rising intonation at the end of an utterance	(1.4)	Silences (time in secs)

Notes

1.   See Sacks, Harvey (1992) – Volume 1, p. 264–265 for extended discussion on questions and answers.

2.   See Sacks, Harvey (1992) – Volume 1, p. 56 for further discussion on the 'project' of questions.

3.   See http://www.bps.org.uk/sites/default/files/documents/code_of_human_research_ethics.pdf for the BPS guidelines.

4.   Garfinkel and Sacks (1970) make the point that in order to possess the required level of competence for 'doing formulating', members of a culture need to be able to exhibit in a methodical way their recognition that 'doing formulating' is going on, and that they can display to co-participants that they are able to engage in those actions which make such 'formulated doings' possible.

5.   In the video recording one can detect a low noise beginning immediately prior to line 2.

References

Anselmi, D., Tomasello, M., & Acunzo, M. (1986). Young children's responses to neutral and specific contingent queries. *Journal of Child Language*, *13*, 135–144.

Bruner, J. (1986). *Acts of meaning*. New York: Basic Books.

Butler, C., & Fitzgerald, R. (2010). Membership-in-action: Operative identities in a family meal. *Journal of Pragmatics*, *42*(9), 2462–2474.

Cole, M. (1980). *Foundations of social thought*. Cambridge: Cambridge University Press.

de Leon, L. (2007). Parallelism, metalinguistic play, and the interactive emergence of Zinacantec Mayan siblings' culture. *Research on Language and Social Interaction*, *40*(4), 405–436.

Filipi, A. (2007). A toddler's treatment of MM and MM HM in talk with a parent. *Australian Review of Applied Linguistics*, *30*(3), 33–41.

Freed, A.F., & Ehrlich, S. (Eds.). (2010). *Why do you ask?:The function of questions in institutional discourse*. New York: Oxford University Press.

French, P., & Maclure, M. (Eds.). (1981). *Adult-child conversation*. London: Croom Helm.

Gardner, R. (2010). Question and answer sequences in Garrwa talk. *Australian Journal of Linguistics*, *30*(4), 423–445.

Gerholm, T. (2011). Children's development of facework practices – An emotional endeavor. *Journal of Pragmatics*, *43*, 3099–3110.

Ginzburg, J., & Kolliakou, D. (2009). Answers without questions: The emergence of fragments in child language. *Journal of Linguistics*, *45*(3), 641–673.

Golinkoff, R.M. (Ed.). (1983). *The transition from pre-linguistic to linguistic communication*. Hillsdale, N.J.: Lawrence Earlbaum Associates.

Halliday, M. (1975). *Learning how to mean*. New York: Arnold.

Heinemann, T. (2010). The question-response system of Danish. *Journal of Pragmatics*, *42*(10), 2703–2725.

Heritage, J. (2002). The limits of questioning: Negative interrogatives and hostile question content. *Journal of Pragmatics*, *34*, 1427–1446.

Ingram, D., & Tyack, D. (1979). The inversion of the subject NP and Aux in children's questions. *Journal of Psycholinguistic Research*, *4*, 333–351.

Jefferson, G. (1983). On exposed and embedded correction in conversation. *Studia Linguistica*, *14*, 58–68.

Keel, S. (2011). The parents' questioning repeats in response to young children's evaluative turns. *Gesprächsforschung – Online-Zeitschrift zur verbalen Interaktion*, *12*, 52–94.

Kidwell, M., & Zimmerman, D. (2007). Joint attention as action. *Journal of Pragmatics*, *39*, 592–611.

Lu, P.C., & Huang, C.C. (2006). Interruption in Mandarin mother-child conversation. *Concentric: Studies in Linguistics*, *32*(2), 1–31.

MacWhinney, B. (2007). *CHILDES – Tools for analysing talk. Electronic Edition* (http://childes.psy.cmu.edu/manuals/chat.pdf). Ed. Mahwah, N.J.: Lawrence Earlbaum.

Marcos, H. (1991). Reformulating requests at 18 months: Gestures, vocalizations and words. *First Language*, *11*, 361–375.

Ninio, A., & Snow, C. (1996). *Pragmatic development*. Boulder, CO: Westview.

O'Reilly, M. (2008). What value is there in children's talk? Investigating family therapists' interruptions of parents and children during the therapeutic process. *Journal of Pragmatics*, *40*(3), 507–524.

Pan, B.A., & Snow, C.E. (1999). The development of conversation and discourse skills. In M. Barrett (Ed.), *The development of language (pp. 229–249)*. Hove, Sussex: Psychology Press.

Psathas, G. (1995). *Conversation analysis*. London: Sage.

Robinson, E.J. (1992). Young children's detection of semantic anomaly. *First Language*, *12*, 207–222.

Sacks, H. (1992). *Lectures on conversation, vol. 1*. Oxford: Blackwell.

Shakespeare, P. (1998). *Aspects of confused speech: A study of verbal interaction between confused and normal speakers.* Mahwah, N.J.: Lawrence Erlbaum Associates.

Sidnell, J. (2010). Questioning repeats in the talk of four-year-old children. In H. Gardner, & M.A. Forrester (Eds.), *Analysing interactions in childhood: Insights from conversation analysis* (pp. 103–127). Chichester: Wiley-Blackwell.

Stokoe, E., & Edwards, D. (2010). "I advise you not to answer that question": Conversation analysis, legal interaction and the analysis of lawyers' turns in police interrogations of suspects. In A. Johnson, & M. Coulthard (Eds.), *Routledge handbook in forensic linguistics* (pp. 155–178). London: Routledge.

Tomasello, M. (2005). *Constructing a language: A usage-based theory of language acquisition.* Cambridge, Mass.: Harvard University Press.

Vygotsky, L.S. (1979). *Mind in society*. Cambridge, Mass: Harvard University Press.

Wootton, A. (2007). A puzzle about 'please': Repair, increments and related matters in the speech of a young child. *Research on Language and Social Interaction*, *40*, 171–198.

Wootton, A.J. (1997). *Interaction and the development of mind*. Cambridge, UK: Cambridge University Press.

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