

RESEARCH ON LANGUAGE AND SOCIAL INTERACTION



ISSN: 0835-1813 (Print) 1532-7973 (Online) Journal homepage: www.tandfonline.com/journals/hrls20

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To cite this article: Michael A. Forrester (2008) The Emergence of Self-Repair: A Case Study of One Child During the Early Preschool Years, RESEARCH ON LANGUAGE AND SOCIAL INTERACTION, 41:1, 99-128, DOI: 10.1080/08351810701691206

To link to this article: https://doi.org/10.1080/08351810701691206



RESEARCH ON LANGUAGE AND SOCIAL INTERACTION, 41(1), 99–128

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ISSN: 0835-1813 print / 1532-7973 online DOI: 10.1080/08351810701691206



The Emergence of Self-Repair: A Case Study of One Child During the Early Preschool Years

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Learning how to talk during the early preschool years involves the appropriation of cultural norms, conventions, and sense-making social practices. In this article, I document the emergence of self-repair practices of a preschool child between the ages of 1 and 3;6 years. Employing a longitudinal single-case approach extract, examples provide insights into the resources that a child employs when acquiring the ability to self-repair. The findings indicate that during the early years, self-repair is a more common occurrence than other-initiated repair, and the ability to self-repair rests on skills of sound/utterance alteration, repetition, conversation monitoring, and an orientation to self-positioning in discourse. The likelihood of the child producing self-repair is associated with the non-response of a coparticipant, highlighting a sensitivity to the interdependence of talk, gesture, and action. It is also linked to the requirements of communicative clarity, implicating the significance of sequential position when repairing. Concluding comments touch on the interactional consequences of repair organization and the variety of discourse contexts served by self and other-initiated self-repair.

Alongside the analysis of turn taking, the study of repair organization in conversation provides a route into understanding the myriad sense-making practices of everyday interaction. In a series of studies, Schegloff, Jefferson, and Sacks (1977) and Schegloff (1987, 1992, 1997, 2000) have mapped out procedures and practices participants call on when dealing with troubles in talk. The identification of participant-oriented trouble in conversation makes available to the analyst indications of

I would like to acknowledge the support of the ESRC (Grant No: RES-000-2200068) with respect to the transcription and analysis of the data corpus cited in this work.

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members' methods, models, and practices said to constitute the ethnomethods of a given culture. Within current literature on repair organization, a number of issues predominate including the question of self-repair (over) other repair (Schegloff et al., 1977), the interdependence of repair organization and turn organization (Schegloff, 1987), nonnative speaker repair/correction practices (Norrick, 1991; Wong, 2000), exposed versus embedded correction (Jefferson, 1987), and the relationship between intersubjectivity and repair organization (Schegloff, 1992). Schegloff (1992) in particular has highlighted numerous aspects of repair organization ranging from insights surrounding the role of next-turn-repair-initiation through distinctions between self-repair and other repair and onto the implications the study of third-turn repair has as a resource serving the intersubjective fabric of social conduct.

The focus of what follows is on repair organization and in particular the interdependence of self-repair and other-initiated self-repair within the *repair space*—which one can think of as the sequence of actions and procedures following, and related to, a specific source of interactional trouble during talk-in-interaction. The strategy I have employed in this article is to outline a developing profile of self-repair skills and so inform one's understanding of repair organization. Highlighting how a young child begins to employ relevant conversational resources should help identify those key aspects of discourse contexts that bear on the incidence and expression of repair as a social practice.

One of the most striking observations of the varied and numerous examples of repair found in conversation is the predisposition or predilection for self-repair—that is, where possible, speakers are accorded opportunities to self-repair as an organizational preference over other-initiated self-repair. Schegloff et al. (1977) observed that opportunities for self-initiation of repair come before other initiation, speakers tend to take up same-turn and transition-space opportunities for self-initiation of repair, and the trajectory of same-turn repairs leads them to be more successful. As Schegloff et al. (1977) put it

In sum: SELF-INITIATED REPAIRS YIELD SELF-CORRECTION, and opportunities for self-initiation come first. OTHER-INITIATED REPAIRS ALSO YIELD SELF-CORRECTION; the opportunity available to the other to initiate repair is used to afford speaker of a trouble source a further opportunity to self-repair, which he takes. This combination compels the conclusion that, although there is a distinction between self-correction and other correction, SELF-CORRECTION AND OTHER-CORRECTION ARE NOT ALTERNATIVE. Rather, the organization of repair in conversation provides for self-correction, which can be arrived at by the alternative routes of self-initiation or other-initiation- routes which are themselves so organized as to favour self-initiated self-repair. (p. 377)

Commenting on the preference for self-repair within repair organization, Schegloff et al. (1977) speculated that one exception to the constrained nature of other correction in conversation may be found in adult–child interaction:

It appears that other-correction is not so much an alternative to self-correction in conversation in general, but rather a device for dealing with those who are still learning or being taught to operate with a system which requires, for its routine operation, that they be adequate self-monitors and self-correctors as a condition of competence. It is, in that sense, only a transitional usage, whose super-cession by self-correction is continuously awaited. (p. 381)

Norrick (1991) similarly drew attention to the prevalence and nature of other correction in adult—child and in native—nonnative speaker talk, suggesting that the adult's orientation toward language learning inverts the preferred order for self-repair evidenced in adult—adult conversation. By way of contribution to the question of how a child begins to employ resources necessary for self-repair in talk, in this article, I examine the emergence of self-repair practices of one language learning child during the preschool years. Before turning to data examples, and with a view to framing the account to follow, there are a small number of studies within developmental conversation analysis that have considered the relationship between repair and children's early turn-taking skills and competencies (Danby, 2002; Goodwin, 1983; Tarplee, 1996; Wootton, 1994, 1997, in press). Wootton (1997), for example, noted that 2-year-olds can engage in retrospective forms of self-repair indicating their ability to monitor their own talk, and Tarplee (1996) examined the sensitivity 2-year-old children have to the phonetic repair work adults exhibit when correcting children's utterances.

Within this literature, one question touched on is the extent and manner of adult—child and child—child correction/repair. Echoing Jefferson's (1987) work on the distinctions between embedded and exposed correction, Norrick (1991), Schegloff et al. (1977), and Goodwin (1983) have documented the prevalence of other correction/other repair in the adult—child talk. This, for Norrick (1991), cast doubt on the predisposed preference of self-repair over other repair in repair organization, whereas for Goodwin (1983), it highlighted the unexpected observation that aggravated disagreement and correction are common in children's conversation (with older children).

One additional issue here is a potential ambiguity germane to repair organization and those circumstances that have been described by Pomerantz (1984) as actions by a speaker in "pursuit of a response." In other words, although repair organization is described typically as those practices and procedures aimed at dealing with troubles in speaking, hearing, and understanding (Schegloff et al., 1977), it is not clear whether one can easily differentiate between self-repair in which a speaker repairs in response to a listener exhibiting an orientation to a potential trouble source in the speaker's own talk with a situation in which the speaker reinitiates an action following a nonresponse by a listener. The standard description and approach to repair organization emphasizes coparticipant orientation to the recognition, identification, and resolution of trouble sources with an ongoing

"speaker-centric" focus (Schegloff, 2007). Self-repair, and other-initiated self-repair is largely concerned with problems surrounding the production, reception, and understanding of the speaker's *talk*. However, there are grounds for distinguishing these from sequence organization problems, that is, repair mechanisms that come into play so as to deal with *turn-taking* trouble. A recycled turn beginning following a prior turn with overlapping talk is such an instance (Schegloff, 1987). One might even suggest, with regards to self-repair, that a second reinitiating action by a first speaker in pursuit of a response could be seen as a special case of other initiation. Given the potential ambiguity over the question of a reinitiating action that takes the form of a pursuit of response and the associated issues of developing repair skills, in the following analysis, I aim at identifying and differentiating self-repair of *troubles in talk* with sequence organization repair mechanisms.

Keeping the previous observation in mind, I turn to the immediate concern of this study: the identification of self-repair in one child's talk as that child is learning how to converse during the early preschool years. Given the absence of data on the nature of children's developing self-repair skills, an examination of extracts collected from a case study of one child's developing conversational skills should provide certain insights and observations germane to understanding self-repair and repair organization. Four issues underpin the analysis of the extracts considered: (a) the incidence of self and other-initiated self-repair in adult—child interactions, (b) the range of resources associated with the child's production of self-repair practices, (c) the variety of discourse and pragmatic contexts within which the child employs repair, and (d) the interdependence and/or differentiation between self-repair *troubles in talk* and sequence organization repair. Throughout, I highlight indications of the increasingly complex nature of both resources and contexts.

THE DATA CORPUS

The extracts I discuss following come from a data corpus that consists of 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, a family friend, and the child's older sister Eva (8 years old at the beginning of the recordings). The target child, Ella, was always positioned in a high chair in view of the camera. The recordings began when Ella was 1 year old continuing until she was 3;5 (at least once each month). The length of the recordings range from 10 to 45 min (average 35), with the total recording amounting to around 11 hr. Transcriptions of all the recordings using conversation analytic conventions were produced (following Psathas, 1995) alongside transcription notations relevant for child language analysis (CHILDES; McWhin-

ney, 2000). The transcripts and digitized video files are linked together using the software facilities of the CLAN suite of programs. The resulting data corpus is lodged at the CHILDES data bank (CHILDES, 2008). The specific sections of the digitized tape recordings for each extract are listed in the appendix.²

RESEARCH PARTICIPATION AND ETHICS

In recent years within both developmental psychology (Burman, 1994) and the sociology of childhood (James & Prout, 1996), questions regarding the status, rights, morality and ethics of asking children to participate in research have been raised. 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 (particularly Clauses 3.5; 3.6; 4.5; 2006). Appropriate ethical procedures regarding the submission and use of the data corpus for CHILDES and the TALKBANK facilities were also followed. These can be viewed at http://talkbank.org/share/ethics.html.

DATA ANALYSIS

Overview of the Incidence and Form of Repair

As part of the process of identifying the earliest examples of self-repair in the corpus, I examined the recordings in detail and noted the overall incidence of self-repair and other repair. I considered each example with respect to various interactional and context-related features, for example, the immediate antecedent of the self-repair (spontaneous; nonresponse by another participant) when it occurred (i.e., within a turn-constructional unit [TCU], immediately afterward, or during the next TCU), the incidence of other (other-elicited) repair, and the form of repair exhibited (e.g., a repeat of the trouble source or a reformulation of some kind).

One interesting aspect of the overall picture (see Table 1), keeping in mind that the recordings are best viewed as a representative snapshot of the conversation this child was being exposed to and producing, is that contrary to earlier suggestions, emphasizing the prevalence of other repair in adult–child talk during the language learning period (Norrick, 1991; Schegloff et al., 1977), self-repair is more predominate than other repair. In only three sessions (65, 99, and 178) is other repair more frequent. One reason for this is that although there were a number of examples, particularly during the 2nd year, of what might be termed adult–child instructional

TABLE 1
The Incidence of Self-Repair and Other Repair

																									I
Infant Year				2nd Year	Year			i					3n	3rd Year								4th Year	ear		
Age (weeks)	65	69	73	77	85	68	94	66	104	801	112	911	120	125	126	133	140	143	150	159	691	<i>821</i>	621	180	861
Self-repair	1	9	4	w	13	11	27	0	28	24	7	4	15	6	22	6	12	16	10	10	14	w	6	6	_
Antecendent	-		C	c	c	V	10		Ξ	٢	_	c	7	v	0	"	=	Ξ	o	9	Ξ	_	9	9	_
MG	-	-	1	1	1	0	2 -		11	_	†	۷ -	CI	C .	7	0	11	11	0	10	11	†	0	o -	†
MS		٠, ١	•	•	,	ι	4 5		- <u>:</u>	,	,	- -	(,	c			,	(,	,	(- c	
NR		n	7	3	O +	n -	01		51	10	30	_	~ ~	4	2 ء	.n. c	_	4 -	7		7 -	_	3	7	3
KIB					_	_	3		_	_			7		4	3		_			_				
Turn-Context																									
NTCU	_	2	4	4	Ξ	10	21		22	20	7	4	10	7	15	2	2	∞	∞	2	∞	4	2	9	2
WTCU		_		_		-	3		4	3			3	1	9	7	7	7	2	3	5	1	2	2	7
SATCU					_		7		7	-				_	_	-		_		_	-		2	_	
LNTCU					_		_						2		1					П					
Form of Repair																									
RP	_	7	3	3	10	4	20		14	12	3		4	_	7	7	2	4	2	_	7		2	_	
RF		4	_	7	3	7	2		6	11	4	4	11	∞	12	_	6	10	9	∞	5	5	5	7	9
PR + RF							7		5	_					2	_	_	2	2	_	2		2	_	_
Other repair	w	e	7	4	∞	10	10	8	6	œ	w	3	∞	w	_	9	10	11	3	1	7	9	3	7	w
Turn Context																									
SATCU						_	7		7			1			_										_
NTCU (TTR)	2	3	4	7	∞	6	∞	3	9	5	4	1	7	3	4	2	7	6	3		7	4	1	2	4
LNTCU (TTP)									1	3		_	_	2	7	_	3	7		_		7	2		
Form of Repair																									
RP	_			33	2	33	9		Э	7	4	-	7		7	\mathcal{C}	2	9			1	2		7	1
RF	4	3	7	_	3	7	\mathcal{C}	2	9	9	1	7	2	2	2	3	2	4	3	_	1	4	7		2
PR + RF							1						П					1					_		2
Note:	Ant S S N N N N N N N N N N N N N N N N N	SP = s MS = NR = 1	dent spont parti misu nonr parti	dent spontaneous participant misundersta nonrespons participant;	Antecendent SP = spontaneous repair; MS = participant misunderstanding; NR = nonresponse by participant; RTB = recycled turn begi	pair; ing; y begii	ndent spontaneous repair; participant misunderstanding; = nonresponse by participant; = recycled turn beginning.		Turn context: NTC = next WTCU = v SATCU = t LNTCU = t	ontext: = nex CU = v CU = CU =	m context: NTC = next tum-constrt WTCU = withinTCU; SATCU = space after LNTCU = later TCU.	un context: NTC = next tum-construction unit (TCU); WTCU = withinTCU; SATCU = space after TCU; LNTCU = later TCU.	ction un	nit (TC		Form RP RF RF	Form of repair: RP= repeat; RF = reformulation; RP + RF = reformulation with repeat or partial repeat.	ir: .t; mulati	on; nulatic	on with	repea	ıt or pa	urtial re	epeat.	

correction,⁴ the child did not exhibit self-repair responses to this form of correction. Another feature of the data is that around the earlier part of the 3rd year (Session 112), there is a gradual change in what appears to elicit self-repair—before that time, more often than not, self-repair is preceded by a nonresponse by a participant; and from that point, spontaneous self-repair is more predominant. Self-repair also appears for the most part to occur in the next available TCU, although as the child develops, there is an increasing incidence of self-repair within the same TCU as the trouble source.

Data Extract Examples: Tracing the Emergence of Self-Repair Skills

I randomly selected examples of self-repair from the data corpus, two from the child's 2nd year (ages 1–2), three from the 3rd year (ages 2–3), and two from the 4th year (ages 3–4).⁵ In what follows, background context information and a summary description of the points of analytic interest precede more detailed discussion.

Context: Immediately prior to this extract, the child and father have been engaged in a pointing and naming activity, interrupted by the father fetching the child's bottle from another room, returning, placing the bottle on the child's high chair, and not immediately resuming the *game*.

Summary exposition of extract: In this example, the child (Ella = E) produces a referring action constituting a *first part* by looking at, pointing to, and attempting to name a video camera. However, on not obtaining a response, she makes three separate repair attempts in pursuit of a response (altering the sound *video*), the third occurring just after the father (F) produces what would appear to be an appropriate reply. The repairs occur at lines 5, 7, and 10:

```
1
    E:
                            (points with left hand toward floor while holding bottle)
               m
 2
                            (looks toward camera and moves to place bottle down)
               (4.3)
 3
    E:
                                       (points at camera location with right hand)
               bay ya
 4
               (1.2)
 5
    E:
               nef wo::
                                                         (moves left hand upwards)
 6
               (0.5)
 7
    E:
               oh fwea::
                                                              (turns left hand 180°)
 8
               (0.2)
 9
    F:
               I know baby
                       Ldi wideo
10
    E:
11
               (1.2)
12
   E:
               hwi get
                                                     (stops pointing and turns to F)
```

13 (0.7) 14 F: that's r↑i↓g:ht 15 (0.2)

Turning to the first transcript, Extract 1 serves as an early instance of communicative behavior in which the child produces a series of utterances that serve as instances of self-repair in light of the nonresponse of the recipient. The resources she employs involve sound alteration, skills of combining sound change with gesture and both in service of a sustained attempt at dealing with the apparent failure of the father to take up the topic she initiates. One should note that at the beginning of the extract, the father is making toast and not sitting beside the child (is facing away from her).

The context of the problem for the child begins following her production of an utterance at line 3 when she looks toward the video camera and points with her right hand, placing her drink down in front of her. The significance of this action should be understood with respect to the observation that previously to the father reengaging with the child (reentering the room), the participants had been doing a *naming activity* that involved either party pointing, the father asking questions, and the child responding. 6 The pause in line 4 indicates where her coparticipant might respond; however, with no reply, the child produces two subsequent utterances (lines 5 and 7) interspersed with a brief pause. A close examination of the recording indicates that each attempt involves a sound change accompanied by a change in hand movement, akin to pointing and (re)signifying the referent being indicated. The interdependence between utterance and action indicate that the child is not simply repeating but altering her actions in pursuit of a response. At line 9, her coparticipant responds, and as he does so, the child produces a sound phonetically very close to a correct version of the word. An indication that the father recognizes a response was called for is evident on his further comment in line 14, while still moving around the kitchen and not looking at the infant, of "that's right" (i.e., yes, that is the case). In this extract, the child has used her incipient conversational skills, verbal and embodied, to clarify what she is referring to, producing self-repair sound alterations in light of the nonresponse of her coparticipant. Jones and Zimmerman (2003) have similarly reported on children's early pointing at this age and commented on their tendency to reinitiate a pointing gesture following a nonresponse to an initial point and suggested that such pointing gestures are akin to "proto-adjacency pair parts" (p. 178). Although not described in precisely these terms, Jones and Zimmerman drew attention to the role of gesture as incipient adjacency-pair formulations in adult-child interaction. In this instance, it is the alteration of the child's *first* that implicates the nonresponse as constituting a trouble source as far as she is concerned. I turn to a further example a few months later.

(b) Extract 2 (a): Child age 1;8

Context: The father has just joined the child at the table where the child who has been eating is close to finishing what is on her plate. The extract begins following a brief discussion identifying and naming the parent's food.

Summary exposition of extract: Here the child makes a request that appears to be heard simply as a second repetition of a phrase her father has used, and only by upgrading her repairs in pursuit of response does she elicit the father's attention, succeeding in making the request recognizable. The necessity for repair emerges from her utterance at line 8 not being responded to, initiating lines 10 and lines 12:

```
F:
 1
              = ye::a
2
              (1.8)
                                                    .....(sits down on chair)
3
    F:
              and baby can have some
4
              (0.5)
5
    F:
              beans in a minute if she wants =
                                                    (positioning himself in chair)
6
    E:
                                  (looks toward bowl of beans at end of utterance)
7
                                                                 (E drops spoon)
              (2.5)
8
    E:
                               (looks toward bowl and stretches out arm toward it)
              beans::
9
              (0.3)
10
    E:
              Beans
                                    (E begins to open and close outstretched hand)
              (0.4)
11
              bean:: ↑NYA: [:::]
12
    E:
                                                      (hand movement increases)
    F:
                             Ldo you want some beans darling?
13
                                                            (turns and looks at E)
14
    E:
                                                         (nods)
15
              (0.2)
16 E:
              yea
```

In this second extract, the child's self-repair again appears to be designed in light of the nonresponse of her coparticipant, this time following her making a request. In doing so, she employs sound alteration resources, however, now adding volume change when emphasizing what she is attempting to communicate. Immediately following the father's utterance at line 5, the child echoes or mimics his proposal, looking up toward the bowl of beans as she does so. In the pause that follows, she then finishes what she has been eating, drops her spoon, and in line 8, produces a request—indicated by stress at the end of her utterance, looking at and reaching out her arm toward the bowl in question. After a short pause and no immediate response by her coparticipant—which constitutes the source of the interactional trouble—the child repeats the request, this time without using pitch movement to emphasis her utterance, however, accompanied by further movement of her arm and the opening and closing of her hand. Again, after a second pause, she further upgrades her repair by producing a loud *demanding* noise and by increasing the

open–close hand gesture as she speaks. This repetitive repair-like procedure is produced so as to make clear her request in light of the apparent failure of the father to comply.

In other words, although the child's utterances at lines 8, 10, and 12 could be interpreted simply as a sign of increased agitation, a close examination of the interdependence of her utterance and gestures indicate the manner in which she produces a *first* by requesting and then repairs following her coparticipants nonresponse. Evidence that indeed the child (in line 12) has now produced something akin to a recognizably *correct* version of a request is indicated by the manner in which the father responds with a clarification request in line 13. Also, only at that point does the father stop what he is doing (eating) and turn and look at the child. Wootton (2007) similarly reported on a child's sensitivity to nonresponsiveness following a turn at talk at around 2 years.⁷

At this age, this child can utilize a range of conversational resources so as to make her request clear following the nonresponsiveness of her coparticipant. These include looking in the direction of what she is referring to when first requesting (line 8), altering the sounds she makes, and adopting accompanying gestures and changing those gestures (lines 10, 12). There may also be some indication that of something akin to *topic extension* evident in the observation in line 8 of selecting and using the phrase "beans::," a phrase she has just employed when agreeing a few seconds previously to the father's proposal. However, referring to a prior sequence some distance from the ongoing talk as a resource for helping to resolve trouble talk can be observed more clearly in the following extract:

(c)Extract 2(b): Child age 1;8

Context: The extract occurs approximately 5 min after the previous extract, with father and child eating and talking about food, activities during the day, and other family members.

Summary exposition of extract: In this extract, what the child is trying to say is not understood by the father, necessitating various self-repairs by the child. The father finally understands her meaning shortly after the child refers to a previously discussed topic associated with the misunderstood word. The site of the problem occurs at line 12 where the child is attempting to say "nursery":

```
E:
              nanny cho iny
1
2
   F:
                        Loh did Jyou know nanny's going to come here tomorrow ↑
3
              (1.5)
4
   E:
              uhhh (0.2) one day
5
              (0.6)
6
   F:
              one day
7
              (1.2)
   E:
              yea ay
```

```
9
                (0.8)
                \mathsf{Tomorrow} \!\downarrow
10 F:
11
                (0.6)
12
     E:
                nii ay =
13
     F:
                = next day?
14
                (0.6)
15
     E:
                nii ay
16
                (0.6)
17
     F:
                nutty?
18
                (0.7)
19
     E:
                nii ay
20
                (0.5)
21
     F:
                I don't know what that means
22
                (0.2)
23
     E:
                nii ay
24
                (0.9)
25
     F:
                ni ay
26
                (0.4)
27
     E:
                ni ay
28
                                                     (F turns away from E and drinks)
                (1.0)
29
     E:
                ↑nii ay
30
                (1.2)
31
     E:
                ni ay
                              (spoken while not looking at F and playing with spoon)
32
                                          (F continues drinking looking away from E)
                (0.7)
33
     E:
                ni ay
                                                    (F turns to E and puts down glass)
34
                (0.5)
35
                ↑ni ay dinna
     E:
                                     (both participants simultaneously resume eating)
36
                (0.4)
37
     F:
                mmhhh
38
                (6.4)
39
     E:
                rosie and din
40
                (1.2)
41
     E:
                ni ay ni ay =
42
     F:
                = oh nursery oh silly dadday oh nursery
43
                nice and \lceil c() () \rangle daddy
44
     E:
```

Here one finds both self-repair and other-initiated self-repair focused on the child trying to convey the meaning of a sound she is making—a phrase that is not being understood by the father. With regard to making clear what it is she was attempting to communicate, the child, toward the end of the extract, employs not only sound alteration resources but also draws attention to the similarity between one phrase and another, and in doing so, refers to an earlier topic the participants have been discussing. It is this referring back that finally resolves the trouble in the talk.

The extract begins with the father drawing attention to the child that her grandmother is coming to visit, to which she replies with a statement "one day," the father echoing response as confirmation (line 6). However, at line 8, the child produces a sound that the father appears to treat as an approximation of "yesterday," which given his original statement in line 2, initiates a correction in line 10. It is at this point (line 12) that the child then produces a sound that may itself simply be her drawing attention to a sound similarity between the word ye yay and (it transpires) "nursery." Whatever it the case, at lines 13, 17, and 21, we then find a series of other-repair initiations by the father: the first two something akin to guessing and the third an explicit statement about not understanding what is being said. To each of these next-turn-repair initiators (NTRIs), the child repeats the original sound in more or less the same manner (lines 15, 19, 23). When doing so again at line 23, one finds the father then repeating the sound itself, to which at line 27, the child again repeats, possibly by way of confirmation (yes, that is the right sound). After a slightly longer pause at line 29 and following the father turning away from the child and drinking, the child then alters her utterance, this time changing the sound, producing a rising pitch at the beginning of her utterance. This procedure she repeats (line 31), producing a second sound alteration, with emphasis on the first syllable but no pitch change movement.

After this eighth attempt, the child then (lines 33–35) produces an utterance that might be glossed as *nursery* (.) *nursery dinner*, spoken as she stops tapping her knee with her spoon, leans forward toward her bowl, and begins to continue eating. In other words, across lines 13 through 35, she has made various attempts at self-repair initiated either by the other (NTRI) or the other's nonresponse despite their co-orientation to the talk (continued eye gaze). It may be significant that her attempt in line 35 occurs simultaneously with both parties resuming eating. The father's response to line 37 is produced as something of a filler item and possibly a move toward topic closure.

Following a pause of around 6 s, at line 39, Ella then produces a phrase that, it turns out, refers to an earlier topic (5 min earlier) in which they discussed what she was doing that day at nursery—singing songs about *Rosie & Jim.*⁹ The child produces an association between the utterance "dinna" in line 35, and "rosie and din" (the manner in which she would say *Jim* was "din"), and after pausing for a second, she then returns to her earlier attempt at *nursery*, this time with emphasis on the first syllable of the first part of the repeated phrase.

The child's reference to a previously discussed topic appears be recognized by the father, who as soon as Ella finishes talking, indicates his agreement or understanding of what she meant in her earlier talk. It is only by referring back to an earlier part of the conversation that the child succeeds in communicating what she was trying to say. In this instance, it might be said that the specific attempts at self-repair, in service of resolving trouble in the talk, were initially unsuccessful, and the child was able to call on additional conversational skills (sound association) to re-

solve the initial trouble. One might note that in this extract, the child is herself being exposed to particular practices of other-initiated repair. In lines 13, 17, and 21, the father repair initiators are directly related to the child's immediately prior talk; however, at line 25, he simply appears to initiate a sound repetition procedure. Whatever else is going on here, such experiences appear to serve as lessons in observing, and engaging in, practices germane to the production of self-repair.

By the time this child enters her third year, she is beginning to use an extended range of resources in pursuit of producing self-repairs. In the next extract, recorded at 2;1, it becomes clear that she (a) has more linguistic resources at her disposal, (b) can monitor multiparty conversation, and (c) can design utterances in response to repair initiators with procedures that display a sensitivity to specific elements of her talk that others are finding problematic:

```
(d) Extract 3: Child age 2;1 (EV = older sister)
```

Context: Child and older sister are sitting eating while the father is washing dishes. Extract begins following a brief discussion between father and child about a family relative.

Summary exposition of extract: Two examples of repair occur here: the first following a nonresponse by the father and the second in the third-turn position and following an NTRI. The first repair that arises follows on from there, being no acknowledgement of her request (lines 4–5); the second is a coparticipant hearing problem (line 7) in which the trouble source is the word "socky" in line 5:

```
F:
 1
               that's right >cause she's not well<
 2
               (8.7)
                                             (E sits back down and looks at her foot)
 3
    E:
               I wan an socky daddy:::↑
                                               (Begins to back foot on chair bottom
                                                                 and glances down)
 4
               (1.0)
 5
               I wan't a new ↑socky:::
     E:
               (0.5)
 6
 7
    F:
               you want a what?
 8
               (0.4)
               a sock y::
 9
    E:
10
    EV:
               LXX
                                                   (EV leaves chair – out of camera)
11
               (0.7)
                you'll have to wait until yus you've finished eating it I can't hear
12
    F:
               what you're
13
               say:ing
14
    EV:
                \cap make one \cap \square
15
               (1.3)
16
    E:
               I want a get ↑ou::::t =
                                                (E banging feet on chair - spoken in
                                                                     sing-song voice)
17
   EV:
               = she said she wanted a socky first
                                                       (E raises body in up/outward
                                                                             motion)
```

```
18 (0.5)

19 F: a <u>so:cky?</u>

20 (0.4)

21 E: yea =

22 F: = no ye you don't need a socky

(1.2)
```

Following a brief discussion about a relative in hospital and a long pause in line 2, one's interest in this extract begins when the child first looks down at her feet and while still eating makes a request with a noticeable rise in intonation accompanied with a stretching of the word "daddy" (line 15). Here, when the father fails to respond, she produces a repair that deletes "daddy," employs the adjective "new" (it transpires she is wearing a wet sock as she speaks), and shifts the emphasis onto the beginning of the final word "sock," stretching the closing sound. In other words, the utterance at line 3 was designed and directed at the father (not her sister who is sitting close by), and when he fails to respond, she designs her repair in a manner that takes into account the fact that she is already wearing socks.

At line 7, we find that the father, positioned at another part of the room, produces an NTRI, and in the third position, the child redesigns her request. In doing so, she indicates her sensitivity to the source of the trouble in the talk, now specifying the item precisely. After a pause, the father indicates why he is having trouble hearing her. At line 16, the child then abandons the topic and instead produces an alternative request, simultaneously changing the position of her body in the chair.

However, at this point, we find her sister (EV) telling the father what the child was originally requesting. To this, the father responds by asking whether that is correct note the stress on the word "socky" in line 19—to which Ella replies "yea" (line 21), nodding as she speaks. In other words, although the original problems that elicited the earlier repairs were unresolved and apparently abandoned by the child, the child displays an orientation to others discussing her talk, evident in the clarification she produces in response to the fathers question in line 19. The ability to monitor the talk of others for how it is relevant to one's self and to employ the appropriate grammar when self-repairing are now elements in her repertoire of conversational resources. There are a number of differences in this instance between a self-repair designed as in pursuit of a response (PRSR), and an other-initiated self-repair (OISR). Note that the first was built on a partial repetition of the request accompanied by a repeated rise in intonation toward the end of the TCU. There are also indications that the child presupposes that the addressee has registered the request given the deletion of the word "daddy." Finally, the PRSR works to clarify what kind of object is being requested precisely. In contrast, the OISR (line 9) displays a co-orientation to the trouble source (line 5) indicated by the echoing of the stretched sound on the word 'socky'; in other words, it takes a minimal form and appears designed relative to the problem of the participants hearing and not the potentially ambiguous nature of the request (she has socks on in the first place).

Up to this point, the child's self-repairs have either been directed at identifying/naming objects, requesting, responding to clarification requests, or implicated following the nonresponse of a coparticipant. In the next extract, recorded at around the mid-point of the 3rd year (age 2;5), the range of discourse contexts being served by self-repair extends to matters of self-positioning in the talk: in this instance, when she is telling a story. Also note that around this time, the child employs mutual gaze as an additional resource in her repertoire of conversational repair skills.

(e) Extract 4 (a): Child age2;5

Context: At the beginning of the extract, the child and her older sister are joined at the breakfast table by the father who sits down while holding a plate of crumpets. Ella is eating crumpets with chocolate spread on them, and her sister has been discussing how long her sister takes to eat.

Summary exposition of extract: In this extract, we first find a self-repair at line 6 where the trouble-source for the speaker involves a word search to make her statement clearer. Then there is an other-initiated repair (line 17) of an unclear utterance coming after an overlap in the talk. The trouble source "vending" (line 13) is clarified as meaning "nannas" (bananas) by the child (line 19).

```
she hasn't even finished [her first one]
    EV:
                                                          (F joins children at table)
 1
 2
    E:
                                        Lyou got crumpets
 3
               (1.6)
                                                    (looks at food then at F at 2-4)
 4
    E:
               em got
 5
               (0.8)
 6
    E:
               em:: honey on it ?=
                                                    (moves body forward and back)
 7
     F:
               = ye::a
 8
               (0.5)
 9
               winnie poo like ↓ho↑ney =
    E:
                                                   (looks toward F and folds arms)
               = winnie the poo does like honey
10
    F:
11
               (0.3)
12
    F:
               who [else]?
13
    E:
                    Lup in my vending
                                               (looking at camera then at F at end)
14
               (0.9)
                                                  (puts arms together around chest)
15
    F:
               pardon?
                                                          (E continues to gaze at F)
16
               (0.9)
17
     E:
               en put in the
                                                          (E continues to gaze at F)
18
               (0.3)
19
    E:
               my nannas
                                                          (E continues to gaze at F)
20
               (0.2)
2.1
    E:
               like ↓nannas =
22
    F:
               = winnie poo like nannas too?
23
               (0.2)
24
    E:
               °yea°
```

25 (0.6) 26 E: Winnie Poo like honey (E uncrosses arms) 27 (0.2)

At the beginning of the extract, Ella produces a self-repair in a sequence in which mutual gaze appears to play a role in holding her recipient's attention while the child completes a word search. During the pause at line 3, Ella looks at the crumpet her father has in front of him, looks up at his face, and then while maintaining eye gaze, produces a self-repair aimed at clarifying what she is asking. She produces a noticeable *forward/backward* movement when saying the word "honey," and it would seem to be the case that the continued gaze has served the function of maintaining her turn at talk while locating the desired phrase. The mentioning of honey occasions for the child an opportunity to extend the talk, or introduce a topic, in that she makes a statement regarding her toy bear whom one learns likes honey.

The father, having produced an affiliative response at line 7, asks who else might like honey; however, while doing so, his talk overlaps hers (line 13). We then observe that the NTRI produced by the father at line 15 is, as Drew (1997) commented, a weak form of "open-class" NTRI, that is, one that is often employed when a listener has trouble understanding not what has been said but why it has been said. In this context, the child's utterance "put" "in my vending" appears to have no coherent relationship with what has preceded it-"pardon" often employed by a recipient when there has been an abrupt shift in topic. Here, she does a number of things in response to this NTRI, which may indicate an orientation to being called to account. First, although the child's utterances in lines 13 and at 17 through 19 remain ambiguous, there are grounds for considering that they involve her either (a) taking up the character position of one of her favorite toys and/or (b) telling a story about what Winnie the Poo likes. Evidence in support for the former might include, first, the observation that just prior to speaking, she looks at the camera; and as she speaks, she folds her arms and looks directly at her father in a sense as if for *performance* effect. Second, in her repair ("vending" to "nannas"), she maintains the first-person possessive pronoun form. Notice in line 17, she first says "en put in the" and then pauses and makes it clear that the bananas being referred to are hers. Third, a careful examination of the video clip associated with this extract reveals that from the point the child says "vending" (line 13) up to the pause in line 20, that is, after she has repaired her utterance in light of F's clarification request, she maintains mutual eye gaze with him, only turning away after there appears to be no further response to her repair. 10 Fourth, at the end of this extract, immediately after "yea," she then produces a closing summary statement and then uncrosses her arms and changes topic, her posture contributing to the sense of performance in the event. It would also seem relevant that although the father's reply in line 16 appears to treat her utterance simply as a comment about her toy, Ella's older sibling appears particularly amused by what is being said, looks toward the

camera herself, and seems to be trying not to laugh. ¹¹ In the same session, one finds an example of the child employing resources that make clear she recognizes the advantages of clarity in talk, using more elaborate skills than those available to her 6 months earlier (Extract 2b previously):

```
(f) Extract 4 (b): Child age 2;5
```

Context: Approximately 30 s after the previous interaction.

Summary exposition of extract: In this instance, the child designs a repair so that her initial agreement with one course of action is overturned by a request for a different course of action. The original trouble source for the child occurs in line 3 (her agreement) and the repair is worked up over lines 5 to 15. A correct version of her repair would be best read as approximating to not in the green cup I've agreed to but "in a china cup":

```
F:
 1
                will I give you some in your green cup?
                                                                  (something to drink)
 2
                (0.2)
 3
    E:
                °vea°
 4
                (0.7)
 5
     E:
                nea in a
 6
                (0.5)
 7
     E:
                in a
 8
                (0.3)
 9
     E:
                °in a°
10
                (1.1)
11
     E:
                in a di::
                                                                     (E looks up at F)
12
                (0.3)
13
     E:
                in a
14
                (0.5)
15
                in a china ↓cup =
    E:
16
     F:
                = alright black china cup
17
                (0.3)
18
    E:
                °yea°
```

Here one finds Ella repairing six times (from line 15) until she finally makes a specific statement regarding a cup she wants to drink out of. In this instance, her repairs are designed to produce an utterance that works to clarify her social status. This is not just any cup but rather a cup used only by people who are competent of being able to use it (older children and adults) and a cup that is contrasted in the talk with her own plastic (unbreakable) green cup. Self-repair is linked to Ella's interest in being associated with being somebody old enough to use china cups, that is, no longer a baby. One also observes that in this discourse, context repair is employed to change something she has just said (at line 13).

The extract begins with the child agreeing to the father's offer of a drink (line 3). Ella then begins a series of self-repair utterances that warrant closer attention. Line 5

initiates her attempt at altering what she has just agreed to ('nea in a'); followed then by two repetitions (line 7 and 9), one loud the other softer; and then, in line 11, looking up at the father, an approximation of *in a different* ("in a di::"). This is then followed up by two repetitions of "in a," serving finally to aid the production of precisely what kind of a different cup: a china cup with stress on "china" and falling intonation on "cup." This emphasis may be indicative of Ella's orientation to what is presupposed by the father asking quite specifically if he should give her some drink in her "green cup"—her plastic cup—and the father's response in line 16 and is best understood with reference to the observation that the black china cups are ones that she has been allowed to use in the past but only under careful supervision (no other cups are referred to as "china" cups). This is interesting in that the child exhibits considerable effort (6 self-repairs) in designing a phrase that marks out her status as an older child. Again, this indicates something of the increasingly complex nature of the discourse contexts that are being served by her attempts at self-repair.

In the following extract, recorded at 2;9, the child exhibits behavior indicative of an increasing ability to integrate various conversational resources, including monitoring the actions of herself and coparticipants and timing her self-repair in accordance with where she is located and the sequence of the talk. Some integration of these various verbal and nonverbal conversational skills is apparent, and in this short extract, one sees Ella produce a self-repair tailored to the dynamics of the discourse context focused on showing the father where something is located:

(g) Extract 5: Child age 2;9

Context: The father and child are preparing breakfast. At the beginning of the extract, the child is standing on a chair beside the father who is making toast.

Summary exposition of extract: At the beginning of the extract, the child produces a self-repair within her own TCU, a repair involving an alteration of a statement about something she will require to a verb outlining a future course of action (line 3—changing of "need" to "get"). Across lines 9 through 11, she produces a second self-repair, this time in response to a question. The trouble source in this instance, "cu::[cupboard]," warrants correction given that the child changes location as she moves. The item she is referring to is normally in the refrigerator:

```
1
   F:
              are you going to bring Jimby in?
                                                                (not looking at E)
2
              (2.1)
3
   E:
              I'm goin need get some mo::re butter (E begins to move at 'more')
4
                                            (F looks at E while she begins moving)
5
   E:
              em I will 1show you
                                                         (mutual eye-gaze E & F)
6
              (0.5)
7
   F:
              where?
8
              (0.8)
9
   E:
              in the cu:::
                            (spoken as she begins to move off the chair - her back
                                                                        toward F)
```

```
10
                (0.4)
11
     E:
                in here
                                        (as she turns part of the way toward location)
12
                (03)
13
    E:
                °in here°
                                (as the touches the refrigerator and begins to open it)
14
                (0.8)
                                                      (F begins to turn away from E)
15
    F:
                I ↑don't think there's any in ↓there
16
                (0.7)
17
     E:
                o:::h
18
                (4.2)
```

In response to a question from her father, instead of replying to the question about her toy, Ella begins (line 3) with an utterance that is both a self-repair (changing of "going" to "need") and by way of a response to his suggestion an outline of a future alternative course of action. Notice first that she begins line 3 with a contrastive pronominal shifting with the phrase "goin" (you going/I'm going) and then continues with a phrase that could be glossed as I'm going to need to get some mo::re butter. Examination of the recording indicates that as she moves toward the end of her utterance, the father looks toward her, and mutual gaze is then maintained while the father asks "where" in line 7.

It is at this point that she produces a repair in response to the father's question, the first part of it ("in the cu::"; line 9) spoken as she turns around on the chair (and her line of sight is now in line with the cupboard behind her—note, not the fridge). She then pauses simultaneously with moving around and away from the cupboard and toward the fridge. Notice that this sequence of actions immediately follows establishing mutual gaze in which the *showing* presupposes the requirement that the recipient should watch (which he does). The following phrases ("in here") occur, first as she leaves the chair and then as she motions toward it with her hand. During the pause at line 14, the father begins to turns away from her, and before the fridge door is fully open, he comments that there may be no butter in the fridge. The integration of the repair with the sequence of actions and the observation that she is monitoring the *watching/listening* of her coparticipant as she moves serves to index the increasing sophistication of the resources available to her at this age including the monitoring of her own talk relative to location and sequence.

By the time Ella is over 3 years of age, one finds that self-repair appears to serve a wider range of pragmatic functions, and they are more complex in the form they take, that is, involving more than word or sound alterations. In the next extract, one finds two self-repairs: one is indicative of her understanding of category membership (line 12), and another follows her production of an *attention getting* sound during talk (line 26). One also finds an other—other repair by the child, correcting a third party. These examples indicate something of the more elaborate resources the child can call on when producing repair forms of talk:

(h) Extract 6: Child age3;1

Context: The father and child are sitting at a table eating breakfast, having just previously been playing with small $Lego^{\textcircled{\tiny{0}}}$ toys while waiting to eat. The child's mother is moving around another part of the kitchen.

Summary exposition of extract: In this extract, the talk revolves around a discussion of names, the identification of boys' and girls' names, with the father pointing out that the toy must be a girl, as it has a girls name. In response, the child remembers somebody in her nursery with the same name (just mentioned); however, in response to this, the father misunderstands or mishears the child. The first repair occurs in line 12, with the trouble source located as the child's recognition that toys don't live somewhere. The second repair occurs in line 32 ("someone") where the trouble source is the utterances across lines 26 to 30. The other correction by the child takes place in line 41:

```
1
     F:
                what's his name?
                                                (F referring to small toy man in car)
 2
                (0.6)
 3
     E:
                em (.) jemmima
 4
                (0.2)
 5
               Jemi↑ma?
     F:
 6
               (0.6)
 7
     F:
                that's a nice name
 8
     E:
               (head nod)
 9
               (1.2)
10
     F:
               where does he live?
11
                (0.6)
12
               he:: lives (.) em he's a robot
     E:
                                                    (E eating when trying to speak)
13
14
     F:
                is jemima a girls name or boy's name?
15
               (1.3)
16
     E:
               girls:: name
17
               (0.2)
18
     F:
               [nods head in reply – looking directly at E]
19
               (0.5)
20
    F:
               so it must be gi::rl
                                                     (F shakes head [no] as speaks)
21
               (0.2)
22.
     E:
               hmm
23
                (0.4)
                °vea:°
24
     E:
25
               (1.9)
26
     E:
                some A:::H (E raises hand and points upward in a marked fashion)
27
28
    F:
               [displays startled/surprised look in response] (F & E mutual eye gaze)
29
               (0.4)
30
     E:
               One
31
               (0.5)
32
     E:
               someone who goes in \underlandannexe
```

```
33
               (1.2)
34
    F:
               goes in nannies?
35
               (0.2)
                                                      (E looking at F while eating)
36
     M:
               in an nexe
37
     F:
                     oh in annexe oh:: yea
                                                    (F gets up and leaves the table)
38
               (0.4)
               °oh xx xx°
39
     E:
40
               (0.5)
41
     E:
               Not:: °in nae::: (0.1) in annexe°
42
               ((sound of rustling paper))
43
               (7.1)
```

Prior to the extract, Ella and her father are discussing a small toy man (and his car), which are placed in front of them as they are eating. The father begins by asking what toy's name is, and on being told "Jemima," comments on the name and then asks Ella (line 10) where he lives, that is, without explicitly correcting her pronoun use. Here, Ella's self-repair in line 12 involves beginning with an answer to where he lives, with a slight stretch on he, but then self-repairs and in doing so, answers that he is a robot, indicative of her recognition of category distinctions between living and nonliving entities.

The father then moves to the topic of the toy's name and begins a sequence of turns that appear to be aimed at calling Ella to account for using an inappropriate name after he has used a male possessive pronoun form (line 14–20). This begins with the father's question in line 14, where there is a noteworthy emphasis on "girls," to which the child replies appropriately (line 16) echoing the emphasis, leading to what appears to be a correction surrounding her using this name. One might note the manner in which the father shakes his head negatively while making a conclusion statement at line 20.

At this point, and across lines 26 to 32, she produces a self-repair, one that immediately follows on from her production of performed *surprise* and/or understanding. Notice that at line 26, as she speaks, she raises her finger and face, to which the father mimics by raising his eyebrows. Then, while maintaining mutual gaze, in line 28, Ella produces a repair specifying who she wishes to draw attention to (someone in her nursery). The father's following NTRI then elicits a response not from the child but from an overhearing third party (the mother) who clarifies what the child has said. The third repair at line 41 is indicative of the child's ability to now produce repair of other's talk, here producing an *other-correction clarification* statement while turning and looking toward the father who at this point is moving across the room, having left the table.

As a final example of the increased complexity of this child's emerging self-repair skills, I turn to an extract in which she is seeking to make clear the specific nature of what she is requesting during a multiparty conversation and in which the participants are shifting location during the talk, recorded at 3;5. Over and above

possessing resources necessary for integrating her talk and actions, in this context, she displays an ability to produce a repair designed with regard to her monitoring of the recipient of her talk and simultaneously observing whether the recipient is observing the actions she is making to help clarify her request. The self-repair is produced while Ella is painting and by indicating with actions how she eats her kiwi fruit and how it should be prepared:

```
(i) Extract 7: Child age 3;5
(L = Adult friend of the family
(J = Adult's infant)
```

Context: The child is painting at a table nearly an infant in a high chair. The father and a family friend are preparing a meal. Just prior to the beginning of the extract, the child asks for some fruit, and the family fried (L) offers to give her some. L has no prior knowledge of how the child likes her fruit prepared.

Summary exposition of extract: The repair observed here involves the child designing her talk and actions (lines 17–19) so that the person being addressed understands the particular manner in which she likes to eat kiwi fruit. The trouble source (lines 11–14) derives from the possibility that her addressee might not understand what she means and given the fact that she is not in the child's line of sight, may not see what her action (of spooning) implies:

```
L:
               how'd you like your kiwi [fruit]?
 1
 2
                                         Lis the pears ripe? =
     E:
                                                                       (E turns to F)
               = no:: none of them ripe \circ vet darling =
 3
    F:
 4
    L:
                      a right pickle
                = d'you [just cut the top] off and eat it like a boiled egg↑ or [d'you have it]?
 5
    L:
 6
     E:
                                                                      no no she
 7
     F:
               likes tri e::m
 8
               peel ed
 9
     L:
                    [peeled?]
                                                                (E looking at F & L)
10
               (0.2)
               but I want it to be
11
     E:
12
     L:
                     L°okay°?
13
                (0.4)
                [spoo:::ned] out?
14
     E:
                                          (E turns to her painting away from L & F)
               thanks Louisa
15
     F:
16
               (0.5)
17
     E:
               I wan te
                                             (E turns toward L - L not looking at E)
18
               (0.3)
19
     E:
               em get a spoon and then spoon the kiwi fruit out it?
                                                                         (E begins to
                                                                   "spoon-out" with
20
                        her hand around [get]. L turns toward E on second [spoon])
21
    L:
                                                     Llike a xxxx egg
```

```
oh you can do thaa::::
22
     F:
23
                  (0.3)
24
     F:
                  you can \( \)do that if you want just \[ \]cut it \[ \] in two \[ \] then \[ \]
25
     E:
                                                        please (E turns back to painting)
26
     J:
                                                                        [va::e va]
2.7
                  (0.8)
```

At the beginning of the extract, a family friend Louisa asks the child how she likes to eat her kiwi fruit and while talking, moves around the kitchen collecting the fruit and moving away from the table and behind Ella. She replies to this question not with an answer to Louisa, note the slight overlap, but by asking her father whether the pears are ripe. Continuing, Louisa then asks Ella how she eats her kiwi fruit, but before she has finished speaking, the father interrupts, saying Ella likes them peeled and trimmed. Across lines 11 through 14, Ella displays an orientation to overhearing what is taking place (use of "but" at line 11) and instead requests that the fruit be spooned out. At this point, one should note that as she says this, she turns back from looking at the adults to the painting she is drawing, using a brush in her right hand.

Possibly recognizing that the details of her request may not have been understood, at line 17, as she begins to repeat what she is saying, she turns toward Louisa; and while Louisa has her back toward Ella, she begins to indicate with her left hand, while looking toward the adult, the manner in which she wishes to be able to *spoon out* her fruit. At the point when she sees the adult turn around and observe what she is doing (her actions—and note Louisa turns around when Ella says spoon for the second time), she then completes her utterance, lowers her left arm, and turns back to continue painting.

There are certainly indications that the clarification displayed through the production of Ella's self-repair accomplishes what is desired. Both adults show that they understand what she wishes. The pragmatics of this use of self-repair follows on from observing and overhearing others preparing to carry out a series of actions that would result in an undesired consequence for the child. Alongside the integration of the actions (the spooning out) and the production of the self-repair, it is evident that the child can now monitor whether the recipient of her talk is observing those actions and responding appropriately.

SUMMARY AND DISCUSSION

The aim of this article was to outline a developing profile of self-repair skills and consider whether this might inform the understanding of repair organization. Reflecting on the nature of language development and talk-in-interaction, Schegloff (1989) made the point that it is repair, more than any other structural aspect of con-

versation, that allows languages to be constructed otherwise than might be imagined—in other words, he suggested that it is because of repair organization that "flexible arrangements can be permitted, as compared to discourse domains like those of science or logic where it cannot" (p. 143). Furthermore, Schegloff (1989) asked the question of how it is that children learn to deal with the moment-to-moment contingencies of life, particularly when the detail of interaction for the "not yet competent ... is even more substantial" (p. 152) given that "time is slower, each aspect larger, recognizing and negotiating through the contingences a more robust project, and all of it being both done and learned at the same time" (p. 152). It is this "being both done and learned" simultaneously that underscores the possibility that one can understand something of repair organization by considering one child's developmental profile. Examining how a young child begins to employ relevant conversational resources should help identify those key aspects of discourse contexts that bear on the incidence and expression of repair as a social practice. I return now to consider the issues that underpinned the analysis: (a) the incidence of self-initiated and other-initiated self-repair in adult-child interactions; (b) the range of resources associated with the child's production of self-repair practices; (c) the variety of discourse and pragmatic contexts within which the child employs repair; and (d) distinctions between self-repair specific to troubles in talk, with sequence repair mechanisms germane to interactional problems.

Turning first to incidence, examining the early emergence of repair during the early years raised the question of the conditions under which a particular initiation, move, or practice in talk constitutes *repair* proper. Although for the most part, the idea of repair addresses the range of procedures and practices that people call on while dealing with troubles in talk, there is a certain ambiguity over whether a nonresponse by a participant is typically dealt with using procedures akin to repair or whether it is, to borrow Pomerantz's (1984) phrase, a pursuit of a response. In the previous analysis, and taking into account the observations of Jones and Zimmerman (2003), the view has been adopted that when the child reinitiates a procedure now altered in some manner, and following on from a failure on the part of her recipient, then this constitutes self-repair of some form.

The data outlined in Table 1 supports work on repair, which highlights the predisposition toward self-repair (over other-initiated repair) in repair organization (Schegloff et al., 1977). The summary information on the frequency and form of self-repair over this period highlighted a number of observations, for example, the prevalence for a self-repair to occur in the next available TCU, the relatively early occurrence of self-repair as recycled turn beginnings (although rare), the late and infrequent occurrence of third-position repair, and the approximately equal likelihood that a self-repair will take the form of a repeat or partial repeat of what the child has just said or will be a reformulation.

Turning to the question of the conversational resources the child brings to the production of repair, one needs to differentiate between self-repair and other-initi-

ated self-repair. The skills and resources a child begins to draw on when producing self-repair not surprisingly change over time; however, the nature of the resources used and why they might come into play highlight certain features of repair organization. During the early years, this child relied on the ability to either repeat or change an initial sound in some way (e.g., volume) and tended to produce such repairs in which there was no reaction to her initial utterance from her recipient (Extracts 1 and 2b). She also displayed a sensitivity to sound association alongside repair, particularly when such repair did not seem to overcome the trouble in the talk (Extract 2b). By the 3rd year, one found an extended range of resources being used including a sensitivity to grammatical form (Extract 3) and evidence of her ability to monitor others discussing trouble in the talk (Extract 3). Throughout this and the following year, one can also begin to identify the significance of mutual gaze, that is, with reference to the production of self-repair. For example, I noted that in Extract 4a, mutual gaze was established immediately prior to the production of self-repair, is evident again in her self-repair 4 months later (Extract 5), and 6 months later is integrated within a self-repair talk/action scenario in which she not only orients toward a requirement that she locate her recipient's attention but co-ordinates her actions and self-repair within a sequence that monitors precisely where her recipient is looking during multiparty talk (Extract 7).

Moving to other-initiated self-repair, although fewer in number overall, again one can identify a developmental profile. In the early examples (e.g., Extract 2b), her response to such initiations are relatively simple and tend to focus on repetition. I noted, however, the differential quality of the forms she is being exposed to at that time—somewhat akin to be given lessons in *things to do* when another points out your talk may be troublesome. By her 3rd year (Extract 3), her self-repair in response to a NTRI involves word substitution and by 2;5 (Extract 4a), in response to "pardon?," produces a self-repair embedded within a *mininarrative* designed by way of accounting for the initial trouble source.

In terms of the resources and skills the child will gradually call on, it seems clear that initially, attention-based simple formulations evolve to serve increasingly complex functions. Note, for example, the manner in which linguistic and sequential determinates were utilized with some effort by the child in Extract 4b, designed as part of a request that marked out her sensitivity or concern with social status. Alternatively, the manner of her repair in Extract 6 demonstrated something of her orientation to membership categorization and her implicit recognition that her father question was inappropriate in some manner (robots don't live).

With reference to the form and variety of discourse contexts served by self-repair, again one can trace out an emerging profile. Initially, these forms are employed either to gain the attention of the other (Extract 1) or make requests (Extract 2a and 3). Then, by 2;5, one finds repair used to ask questions more clearly (Extract 4a), *tell a story* (Extract 4a), and employed in contexts where there is more concern with social status or positioning (Extract 4b). As she approaches the 4th

year (Extract 5), her conversational skills have developed to the point in which she will employ repair aimed at *showing and telling*—and in that sense, designed to be *future oriented*. Interestingly, in Extract 6, the form of self-repair exhibited following *surprise* appears to follow on simply from the child remembering somebody's name, and yet again, the child works to clarify her talk. The last extracts serves as a good example of this child having the ability to call on the necessary skills to make sure others understand the nature of her request and can do so in a multiparty discourse context.

In the preceding analysis, I also highlighted certain distinctions and differentiations specific to what constitutes self-repair of troubles in talk with what might be termed sequence implicated repair phenomena. In a number of extracts (1, 2a, 3), the child either altered an action or utterance following the nonresponse of her coparticipant (in pursuit of a response; see Pomerantz, 1984) when the form of her repairs indicate a sensitivity to sequential implicativeness. I noted that although early alterations seemed sound-alteration focused, by age 2 (Extract 3), the manner of the alteration appears to take into account what might be presupposed by the father's nonresponse (the wet sock incident). There may be indications that the role of mutual gaze is important in the differentiation of self-repair in pursuit of a response with other instances of self-repair. The manner and form of self-repair alterations in Extract 2b are markedly different from the somewhat minimal changes exhibited in Extract 1, different again from the later skills the child possesses maintaining mutual gaze by Year 3 (Extract 5) when self-repairing in a context where the trouble in the talk is interlinked with the child's actions and location. Whether a listener has registered receipt of a first is likely to have a particular bearing on the likelihood of a self-repair in pursuit of a response, and the details of how and in what ways children begin to utilize such resources await further clarification.

By way of conclusion, Schegloff (1989), following the work of Ochs (1979) on language socialization, made the point that children, as well as acquiring the lexicon and syntax of a given language, will have to learn how the relevant interactional and sequential organizations (e.g., repair) operate formally, particularly how these organizations incorporate recipient-design considerations. This case study has mapped out some of the resources and skills deployed by one child as she acquired the ability to self-repair. In mapping out the incidence and form of self-repair, it would seem that the predisposition for repair organization toward self-repair over other repair is reflected in the data for this child. One has also been able to gain some insight into the manner in which relatively simple initiation sequences gradually take on more complex forms, increasingly serving the demands of different discourse contexts. Self-repair as a social practice also appears to be related to the increasing interest the child has with taking up those social-role and status positions appropriate to her particular cultural context. Not least, it would seem that repair organization provides the interactional circumstances within which a child's evolving repertoire of skills and resources become embedded, and realized, as repair practices.

NOTES

- 1 Gene Lerner, in an extended discussion with an anonymous reviewer of this article, made the point that although there are intimate connections between repair and preference/dispreference (see also, Schegloff, 2007) organization, issues surrounding what speakers produce after a nonuptake await clarification in the literature. Lerner noted that a reissuing of a "first" where there is a noticeable absence of a conditionally relevant matching action-type can be a type of repair. I would like to acknowledge the valuable role of this input to the ongoing development of this article.
- 2 At the time of submission of this article, these extracts could also be viewed at http://www.kent.ac.uk/psychology/department/people/forresterma/qtmov.htm.
- 3 A statistical test indicated the preference for self-repair over other repair over this period in question (sign test: p < .01).
- 4 The appendix provides an example of instructional correction in which the child does not respond.
- 5 Interested readers can view the digitized recording of the extracts on the CHILDES database. Extract details are itemized within the software program CLAN as

CLANX (Mac) WebData/childes/English-uk/Forrester:

Extract 1: lines 765-782; file /69.cha lines 62-82; file /89.cha Extract 2(a): Extract 2(b): lines 310-354; file/89.cha Extract 3: lines 933-952; file/108.cha Extract 4(a): lines 593-613; file/125.cha Extract 4(b): lines 642-665; file/125.cha Extract 5: lines 34-48; file/140.cha Extract 6: lines 213-244; file/159.cha Extract 7: lines 888-909; file/180.cha

- 6 The events preceding this extract can be seen in the full video transcripts available in the CHILDES file (69.cha), with examples occurring at lines 711, 730, 746, and 749. For reasons of space, descriptions of these occasions are not included here.
- 7 The developmental data on young children's understanding and recognition of communication failure of the type described here are for the most part restricted to experimental studies in which children are asked to explain speaker and listener problems with potential misunderstandings. It is not until around 4 years that children provide adequate and defensible explanatory account (e.g., see Robinson, 1981).
- 8 Distinguishing what is sequentially implicated regarding the kinds of actions a speaker engages in following a *nonuptake* can be particularly challenging with adult—child interaction. In this instance, the mutual eye gaze between participants may or may not serve as evidence of recognition that a first has occurred. Not responding when looking at the other would appear to be a quite different (and less ambiguous) action compared

- to not responding when it remains unclear whether an addressee has heard or not (no eye gaze).
- 9 This is identifiable at line 160 of the 89.cha file; see http://childes.psy.cmu.edu/data/ Eng-UK/Forrester.zip.
- 10 Interestingly, and as evidence that this conversation is being carefully monitored, the older sister (EV) also turns and looks at E and F following F's NTRI and turns away at the same point following the child's repair.
- 11 Interested readers may wish to view the associated recording to note the manner of the coparticipant's orientation to the child's talk.

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APPENDIX

In this representative example of adult instructional correction, the father, through the production of a clarification request and a corrective statement, makes clear the mistaken nature of the child's utterance in line 9. In such examples, the child does not produce a specific orientation to re-producing the correct from that has been pointed out to her:

Child age: 1;7

```
(0.7)
2
    E:
               more
3
               (0.4)
4
    E:
               eggy =
                                                   (moves to stand up in high-chair)
5
    F:
               = hm<sup>↑</sup>m
                                            (turns head toward E while cutting food)
6
               (0.2)
7
    E:
               ehhhh
8
               (1.7)
                                  (F turns away from E, who looks at bowl on table)
9
    E:
               nana
10
               (0.5)
```

128 FORRESTER

```
Egg[y]
11
     E:
12
     F:
                    Lna_na?
13
                (0.2)
14
     F:
               it's not a nana↓
15
                (0.4)
16
     F:
                you you try some eggy wiff
17
18
                .hh tell me if it's ↓good
     F:
19
                (0.7)
20
                °woah°
     F:
21
                (0.5)
22
     F:
                tell if it's ni::ce
23
                (1.7)
24
     F:
                °if't° tastes good
25
                (0.4)
26
    E:
                                          (simultaneously sound of spoon on table)
                good
27
                (0.3)
28
     E:
                hhh
```

During the pauses at lines 13 and 15, although continuing to look at what the father is doing, no response is forthcoming. I note in this example that she had already (line 11) produced a self-repair to line 9, but the manner of the father's interruption and subsequent follow-up statement suggests he did not hear her repair. It is also the case that the father does not produce a second NTRI after line 14.