CONVERSATIONAL REMEMBERING AND FAMILY RELATIONSHIPS: HOW CHILDREN LEARN TO REMEMBER

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We analysed extracts from conversations between mothers and pairs of siblings aged between two and six years. Each conversation was recorded in their own homes by the mothers themselves, with no observer present, as they and their children looked through their collections of family snapshots. The analysis centres on the ways in which the mothers and children used the pictures as depictions of a shared past that could be constructed and communicated in conversation. The photographs gave rise to rich conversations, not only about the contents of the pictures, but also about contextual, recalled or inferred events and situations not depicted. These elaborated rememberings were based on a restricted set of related concerns, all of which are important dimensions of family biography - affective reactions, their justification and sharing, issues of personal identity and change, relationships with others, significant objects - all of which served as criteria of what was memorable, and of how particular memories led to others. The mothers especially were disposed to use the pictures as routes into these non-depicted elaborations, and in doing so demonstrated to their children some important principles of how to remember - such as the criteria of memorability, the use of other people as a mnemonic resource, and the role of contextual inference and argument in constructing a jointly sensible version of the past. The 'scaffolding' metaphor is discussed as an appropriate description of how the mothers demonstrated and communicated these things, while engaging themselves in the children's own efforts at remembering.

We are concerned with the development of remembering as a collective and joint activity, using a theoretical framework inspired mainly by Bartlett (1932) and by Vygotsky (1962, 1978). According to this perspective, memory, and the activity of remembering, have

Journal of Social and Personal Relationships (SAGE, London, Newbury Park, Beverly Hills and New Delhi), Vol. 5 (1988), 3-25

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social foundations in at least two senses: (i) Content - much of what we know is acquired not through raw perceptual experience, but communicated to us by other people. Our understandings an rememberings are permeated by culture and communication. Eve our raw experiences are generally experiences of culturally signif cant things — other people, personal relationships, significar events, signs and symbols, the physical world of artefacts, the but and modified environment, and of course language. (ii) Processlot of the remembering that we do is embedded in social an communicative settings, such as conversations with other people We remind each other of things, share memories, argue about whe really happened, construct joint versions of events. The mnemon burden of everyday existence is rarely an individual load, even h adults. In some earlier work we examined remembering by adults? a joint activity conducted through conversation. As adults, when remember we freely and habitually use other people and materi artefacts as mnemonic resources in the context of conversativ activity (see Edwards & Middleton, 1986; Middleton, 1986). W present here an initial study of conversational remembering b tween parents and their children. Our data are transcripts of con versations between parents and their young children, recorded by the participants themselves at home as they looked through the own collections of family photographs. Such a mundane and fre quently occurring social context provided a rich source of example of conversational remembering.

The suggestion that in studying family conversations we can mak discoveries about the nature and development of rememberin carries with it the implication that the development of such osten ibly cognitive and individual a process as remembering may b closely related to what is generally taken to be a separate domain theory and research, that of interpersonal relationships. In th perspective outlined here, the connection between rememberin and relationships looks both ways. Relationships are a determinar of remembering, providing criteria of significance (defining what worth remembering, and how memories are linked together to te the story of people's lives), and providing also a forum for the process itself (a context within which communicative rememberin is done). In the other direction, remembering is a determinant relationships. Relationships can be defined, negotiated, redefined consolidated, disputed, through conversations about the pas Arguments and agreements occur about what really happened, wh

said what and when, and with what intent; glosses are put upon the past, with the aim of defining the present and future paths that a relationship might take. Studying relationships through conversational analysis, such as through conversational remembering, is the sort of 'processual' investigation advocated by Duck & Sants (1983), who criticize a prevailing tendency in relationship research 'to act as if relationships ... are timeless states or rootless events, rather than a continuous process with temporal energy, changing form, and a place in the history of the participants' lives' (p. 32).

The importance of family conversations to general cognitive and linguistic development is well understood, and there are some recent indications of their importance to the development of memory in particular (e.g. DeLoache, 1984; Tizard & Hughes, 1984; Eisenberg, 1985). There is also a considerable body of literature that argues for a social approach to the study of memory development (see, for example, the observational studies of Ratner, the diary studies of Nelson & Ross, and other work situating the developmental study of memory in naturally occuring contexts reported in Perlmutter, 1980). Despite the social dimension in this literature, the issues have remained tied to an essentially individualistic conception of memory, derived from mainstream cognitive and developmental pyschology. For example, they are concerned with the developmental relationships between recognition and recall, and with whether episodic precedes semantic memory (Ratner, 1980; Nelson & Ross, 1980; DeLoache, 1984). Other issues include the growth of voluntary control, and the reasons for infantile amnesia. There has been little concern with the notion that memory and remembering are in some sense intrinsically social phenomena, embedded in cultural and communicative forms and in interpersonal relationships.

Exceptions to this general pattern can be found in the review by Rogoff & Mistry (1985) of work that approaches memory development as a cultural phenomenon. One of the main conclusions of this work is that 'memory skills develop as children adopt mnemonic tools and skills used in the cultural situations they experience, in collaboration with other people as they remember things in practical activities' (p. 137). Our own work is an attempt to do this, but with one additional feature. We are concerned with the development of the practical activity of remembering as it is, and remains, a joint activity. We are seeking to understand the developing capacity to engage in verbally regulated joint mental activity. The developmental process is not simply one of increasing independence or individuals from the initial 'scaffolding' of adults, but the develop ment of an essentially social mentality that remains so throughour adult life. It is not an *incidental* fact of human nature that people habitually share and compare their knowledge and thought with those of other people. That they do so in open acts of communication has the advantage of rendering these things amenable to investigation. Its importance lies also in what it implies for the social basis of thought. Our theoretical assumptions are those of the Sovie scholars (especially Vygotsky, Bakhtin), that even for individual engaged in private reflection, the structures and content of knowledge and thinking are largely couched in communicative forms that derive from transactions between people.

Our approach to the activity of remembering has two central com cerns. The first is to do with the study of conversations in which people share with each other their versions of past experiences and events — i.e. with the verbal regulation and mediation of rmembering. The second concern is with the developmental process and how this is mediated both through conversation and through the use of significant material artefacts. The developmental issue one of how children come to use language and other cultural art facts, in the context of conversation with other people, to define th content and the criteria of what is memorable in their lives. Again we can distinguish two main issues, of content and process: (Content — what is worth remembering? By what criteria are thing considered memorable? How are past events relevant to the con cerns of the present? (ii) Process — what kinds of communicative and cognitive operations are used to address past experiences? Ho do we learn to participate in the conversational activity of join remembering?

Conversational Remembering: some issues and data

We have recorded conversations between mothers and childre aged from two to six years, oriented around family photographs, holidays and the like, which served as a mnemonic focal point for the mothers and their children. Five families have been involveds far, and each session has included a younger and an older siblin within that age range. The procedure was that we approached som families known to us, in which there were young children, an discovered that they all had collections of family snapshots, and that they enjoyed looking through them from time to time. We showed the mothers how to operate a small and unobtrusive (Sony Walkman type) cassette recorder, and asked them to record such a session for us next time it arose. We said nothing about 'memory', 'remembering', or our interest in that issue, but simply that we were interested in what the family had to say about the photographs. In each case the photographs proved to be a rich stimulant of joint remembering.

Like words and conversations, family photographs are also semiotic and culturally meaningful things, semiotic in that they are depictions of past situations and events — signifiers, or representations of something else — and cultural in that there are social and familial conventions involved in what sort of pictures they are, in who takes what sort of pictures of which sorts of events, circumstances and subjects (Beloff, 1985; Musello, 1979). Learning how to remember the past through conversations about family photographs involves learning how to 'take meaning' from such pictures in a sense similar to Shirley Brice Heath's (1982) notion of taking meaning from written texts. That is to say, it involves seeing photographs as depictions of events from a shared family history, and picking up from them the clues that enable them to serve as reminders of contextual events, while those events themselves are recreated and conventionalized in conversation.

Let us begin with the opening sequence of dialogue from the first mother-child pair we recorded. 'Paul' was aged 4:3 (years:months). He was busy examining the pictures with a magnifying glass, engrossed in how the images could be enlarged. In this and the following sequences of dialogue, slashes denote pauses in speech, of under two seconds (/), or over (//); bracketed dots (...) denote missing or undecipherable speech.

Sequence 1: Paul (4:3) and his mother

MOTHER: It must have been a sunny day in that photograph/ mustn't it? PAUL: Yeh// Oh let's see/ see/ that/ comes/ bigger. MOTHER: Mm. (. . .) Where were you then?/ Can you remember? PAUL: There/ and there's Rebecca look at/ her ugh! (*Laughs.*) MOTHER: She's pulling a funny face/ isn't she? PAUL: Yeh/ she thinks it/ it's so mum/ let's see/ let's see what that boy/ done/

let's see if there's any/ agh/ it's big/ do you like/ MOTHER: You didn't like that bouncing castle did you?/ Do you remember? PAUL: Yeh. MOTHER: It kept falling over/ you couldn't keep your balance. PAUL: No.// (Laughs quietly.) MOTHER: Do you like them now? PAUL: Yeh. MOTHER (doubting tone): DO you?

The most obvious difference between Paul and his mother is that while Paul appears to be concerned with the surface appearance of the picture, magnifying parts of it and remarking on what his sister Rebecca looks like, his mother makes persistent efforts to get him to see it as a depiction of a memorable past. She draws his attention to the depicted scene, invoking memories of things contextual to it - the notion that the bouncing castle was something he did not like. that he could not keep his balance. She presents the past as rational and connected, and as memorable on that basis — not liking the bouncing castle related to the fact that it kept falling over and made Paul fall over. In the way that she talks about the picture, Paul's mother presents it to him both as a depiction of recognizable and memorable things from a shared past, and also as a clue or reminder of things not actually depicted. The route into these non-depicted memories is via affective reactions and personal involvement how Paul felt about things, how they affected him, and their relevance now, to the present — does he still not like bouncing castles? So, past experiences are offered as a meaningful part of a continuing biography and development of personal identity. Right at the beginning of the sequence she demonstrates something important both about remembering and taking meaning from pictures — the role of inference: 'It must have been a sunny day in that photograph/ mustn't it?' Photographs can be read for clues about the scene depicted. Sunny days are associated with pictures with sharp contrast and deep shadows, with sea and sand, blue skies, summer activities and clothing, and so on. None of those clues is explicit in what the mother says, but the implication is clear, that the photograph in some ways permits or affords inferences about the weather. In fact, in later sequences, some of these 'affordances' were made explicit — their mother managed to elicit from her children the notion that you can tell how warm it must have been from the clothes (or lack of them) that people were wearing.

As far as learning how to remember is concerned, sequence 1 by itself does not show much on Paul's part. What it does tell us about is Paul's *learning environment*. His mother was not simply talking about pictures. She was modelling, implicitly, how to remember. She modelled how remembering could be done through the *mediation* of pictures of the past, which could be read for clues to the contextual circumstances depicted; past events are memorable in terms of how they affected us, how we reacted to them, and we can use inference as a basis of reconstruction. We have another resource more powerful than any of these: namely each other. Remembering can be achieved through talking to people. Paul did not have to work out how to do these things simply by looking at the pictures by himself, nor merely through overhearing his mother talking. She actively involved him, addressed him directly, invited his participation and agreement by the use of tags — 'You didn't like that bouncing castle *did you? Do you remember*?'

Before looking at some more data, we shall present a brief outline of what we think are the major 'joint remembering' features of the conversations we have recorded. This is not intended as a definitive descriptive framework, but as a working outline of the sorts of things that we think are important and identifiable in the data.

At the most general level, is the nature of the *activity* that the mother and children were involved in. Within that general activity of conversational remembering with photographs, we may distinguish three major aspects of the process: deixis, depiction and elaborated significance. Deixis, as the term is used in discourse analysis (see, for example, Lyons, 1977; Brown & Yule, 1983), is the process through which acts of speech are rooted in particular contexts of time, place, speaker and hearer. We use the term here to include the orientation of speaker and hearer to the pictures, the invocation of the past in relation to the present, and the location of depicted scenes as being photographs 'taken' by someone at a particular time and place. Depiction is the relationship between the picture and the scene photographed. A family snapshot is a semiotic object, both a picture in its own right and also a depiction of something else which can be accessed through conversation and recall. In nearly all of the conversational exchanges about them, it was the thing 'signified' (the past event recorded) that was the thing of interest, not the 'signifier' (the picture). The importance of depiction is that it is a direct route between the present and the past, a mediator of memory. In talking about what the photographs depicted, mothers and children exchanged, argued and agreed upon joint versions of a shared family history. The third term, elaborated significance, is meant to capture the essence of what was at stake in the activity. All of our family groups talked about the depicted scenes with a limited and remarkably similar set of concerns. The past was noted and recalled in terms of why and how it *mattered* to them. What mattered were their affective reactions to things, their personal involvement and actions, their personal identity and how this was presented or altered through time, their relationships with each other and with other depicted people, and, not least, with rationales and explanations of events, of personal conduct and of affective reactions.

Deixis-depiction-elaborated significance

In fact, the terms deixis-depiction-elaborated significance, in that order, describe the sequence of many of the joint recall exchanges that we have examined. There appeared to be a canonical procedure in which the participants would move through that sequence as a means of remembering, as a route to the past, mediated by the pictures: deixis (look at that, the picture or some feature of it): depiction (it is a picture of such-and-such a person or activity in such-and-such a setting or context or particular time); elaborated significance (we liked it, or not, or it reminds us of something else related to it, or it needs explaining, etc.). Here are some illustrations.

Sequence 2: Paul's birthday cake

PAUL: There's there's my birthday cake./ It's the boat one. MOTHER: Yes. PAUL: Have I still got that boat? MOTHER: Erm/ I think we used just pieces off of it didn't we? PAUL: Yeh.

Deixis: Paul points to the photograph where the cake from his birthday, three months ago, is pictured. This engages his and his mother's attention to it.

Depiction: He identifies it as a particular object from a past event, his birthday cake, memorable as the one that had a boat on it.

Elaborated significance: The boat on the cake clearly made it special, and Paul brings the past to bear on the present — has he still got that boat? His mother reminds him of what happened to it.

Sequences 3, 4 and 5 provide further examples. (Square brackets mark the start of simultaneous speech).

Sequence 3: Paul's 'criss-cross' (Paul is 4:3)

PAUL: Hey there's (...) trucks. MOTHER: There/ that's what? PAUL: Trolley trucks. Oh there's (...) MOTHER: Criss-cross. Is that what you mean? PAUL: Criss. Yeh/ I want my criss-cross. MOTHER: Well it broke. PAUL: (plaintively) I haven't got one. I want one. MOTHER: Well it broke didn't it? You used it a lot and then it/ gave up the ghost.

Sequence 4: Driving the family car

MOTHER: Look at you inside this photograph. PAUL: Is that our new car? MOTHER: That was the car we hired./ Oh look you're pretending to drive it/ aren't you? PAUL: Mm.

Sequence 5: Rebecca's hair (Rebecca is 5:10)

MOTHER: Look here/ having breakfast out in the sunshine. REBECCA: Hey Mummy/ I've got crinkles. MOTHER: You've got what? REBECCA: Crinkles in me hair. FATHER: Oh in your hair/ yeh. MOTHER: You'd had it plaited and it had dried in the sun.

Again, child or mother orients the other to some aspect of the picture - 'Look at that'. Then they identify what it is a depiction of, and go on to elaborate that depicted scene from memory. In each case the mother provides some additional information linking the depicted scene with other past events — Paul used his toy a lot and broke it, the hiring of the car, the plaiting of the hair, and in sequence 2 the cannibalizing of the birthday cake boat — and on top of these elaborations she also provides explanatory links between them. The elaborated memories are offered as the *reasons* that the boat and the criss-cross toy are no longer available, and that Rebecca's hair was all crinkly. This amounts to a basic procedure in which mother and child are jointly oriented to the picture, establish it as a depiction of some memorable past scene or event, and elaborate the significance, connectedness or relevance of it with regard both to other memories and to the present time. Via deixis and depiction they follow a shared path to past experiences, and can root around amongst these memories, evoking, connecting and moving amongst them according to the significances that make them memorable, and, in doing so, piece together a joint family biography.

Affect, identity and relationship

The most interesting aspect of these conversational rememberings was the way in which the pictures served as starting points for further elaborations. These elaborations are the mediated rememberings, and they provide a particularly direct expression of what it is about past events that makes them (for these people) worth remembering, as well as evidence of the ways in which their everyday memories are connected to each other. They remember what matters to them, significant things, and they express in conversation both the contents of these rememberings, and also the grounds of their significance and connectedness. The major 'grounds' for remembering that kept cropping up in our transcripts were to do with affective reactions to things, including reactions to things that were unusual or novel, things in which the personal identity of self and others was at stake, and events that signified something about social relationships between family and friends. Many of the photographs gave rise to simple identifications of people — that's X, Y or Z. Few passed without further comment or elaboration. Identity, relationship and affect were often simultaneously evoked by particular pictures, as we would expect, since these are bound to be closely related issues in any study that delves into what matters to members of families.

In sequence 6 Paul notices that he is unexpectedly absent from his seat at the dining table, in a photograph taken when on holiday.

Sequence 6: Fresh cream and crab

PAUL: Where/ where am I?// There is my seat. MOTHER: Mm/ you're not quite in that photograph/ here look (pointing to another picture of Paul sulking) you'd got the grumps that day. PAUL: Why? MOTHER: I think you was tired in that photograph. PAUL: Well I couldn't eat all that. MOTHER: What are they? PAUL: Strawberries and cream. MOTHER: Mm. PAUL: I didn't like the cream. MOTHER: Did you not? PAUL: NO nO. MOTHER: It was fresh cream./ Don't you like fresh cream? PAUL: NO. MOTHER: You like ice cream though don't you? PAUL: Mm.

MOTHER: What's Daddy enjoying? PAUL: He/ MOTHER: He's got a big grin on his face hasn't he? (*Paul laughs.*) Look at his salad. (...) It was a sea food meal. PAUL: Yeh the cran meal/ thing/ you remember? MOTHER: Yes/ when I had the crab. PAUL: Did I eat mine all up? MOTHER: Erm/ no I don't think you liked it did you? PAUL: No.

The version of events that Paul and his mother eventually agree upon is not one that is contained in the photographs, nor one that either of them could have articulated separately. The elaboration stems from the mother's observation that Paul had been grumpy that day, and proceeds in the direction of an explanation of his mood. She appears to learn for the first time that Paul did not like the fresh cream, and that his behaviour on the day in question may have been to do with food rather than tiredness. They manage to establish what is important, what is at stake for their personal identities, similarities and differences — Paul likes ice cream but not fresh cream, while his parents enjoy crab salad but he does not. The remembering is organized around likes and dislikes, and the distinction between what some family members like and others do not.

This reconstruction of the past according to affective reactions, and the need to explain them to others, occurred regularly in our transcripts. In sequence 7 Stephen, another boy aged four and a half, is looking with his mother and younger sister at a photograph of his last birthday party. Various distractions and exchanges between the mother and the younger sister are edited out, so we are left with Stephen's persistent struggle to explain his apparent sadness on his birthday.

Sequence 7: Stephen's birthday

MOTHER: Look at how tired Stephen looks./ (...) STEPHEN: Why do I look sad? MOTHER: Because that was the end of a long birthday party (...) STEPHEN: Yeh 'cause I liked my birthday. MOTHER: Yeh you were just worn out. (...) STEPHEN: Uh/ uh/ uh/ (pointing to his new slide, in the picture) that brung down and got stuck in that part of the bottom of/ you know the top of my slide MOTHER (agreeing): Uh huh. STEPHEN: That fits on there (...) MOTHER (looking at another picture): Oh yes Stephen's crying there/ Let's find another page where Stephen's not crying OK.

STEPHEN: 'cause um/ I did/ I can't/ I didn't understand that birthdays HAVE to go away.

Stephen, Paul, and other children and their mothers share the assumption that affective reactions require explanations — that they are, or ought to be, in a sense rational.

In another recorded session, a little girl Sarah, aged 3:4 is shown in a photograph to be crying. Her mother prompts her for an explanation:

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Sequence 8: Why Sarah was crying
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MOTHER: (...) You was crying. I wonder what for. You remember why you was crying there?
SARAH: Yeh.
MOTHER: Tell me why.
SARAH: 'Cause you was gone.
MOTHER: I was gone./ Where did I go?
SARAH: Southport.
MOTHER: Did I? I don't remember going to Southport./ I think it was at the Liverpool festival wasn't it?

Later, Sarah's sister Justine (aged 5:7) is asked by her mother to explain why one of the boys in a picture of her play group is crying— ''cause he doesn't want every/ everybody to splash'. Explanations were mostly requested, prompted or provided by the mothers, and we would suggest it as a working hypothesis that children learn that affective reactions are open to retrospective explanation precisely through being invited by their parents to talk about them in that way. We shall clearly need more longitudinal developmental data to substantiate that idea. If we are right, then this deceptively banal exchange between the two-year-old Helen (2:3) and her older sister Sandra (4:11) may be more important than it looks:

Sequence 9: Why 'yuk'?

HELEN (Looking at a picture of herself): Yuk/ yuk. SANDRA: Yuk. MOTHER: What's so/ what do you mean/ why did you say yuk? Why did you say yuk Helen? HELEN: I don't know. SANDRA: Because/ because Helen yuk/ is dirty. MOTHER: Mm. I remember that. You were filthy. I had to clean you up. You were dirty. Helen's reaction is to the depiction of her looking dirty. Asked by her mother to explain her reaction, she is apparently unable to comply. The mother then recalls the episode, and places the picture into a remembered setting. Sandra and the mother are effectively demonstrating here to Helen how to verbalize and explain her reactions so that others can understand.

The importance of personal *relationships* in defining what is memorable is very clearly expressed in a brief exchange between Paul and his mother, looking at a picture of mother with Paul as a baby:

Sequence 10: Mother love

PAUL: Is that me? MOTHER: Yes that's you/ mm. PAUL: Oh/ that's nice. Did you love me there? MOTHER: Oh I DID/ yes.

Remembering the past is an activity done to serve the purposes of the present. In sequence 11 Paul is sorting out the extent and limits of his personal prowess.

Sequence 11: Paul's speed and strength

PAUL: Oh/ there's my/ I was at playschool. There's Robert. There's me.// I'm beating them two boys.
MOTHER: 'Cause you were running fast.
PAUL: Yeh/ they're running so fast/ Look (*switching to another picture*) you can't pull me over there/ Grandpa can't.
MOTHER: Why can't he pull you?
PAUL: I don't know/ er/
MOTHER: 'Cause you're very heavy?
PAUL: Was/ I was SO heavy/ I bet a giant/ I bet I can't lift a whole house.
MOTHER: I don't think you're that strong/ are you?

Not only is Paul identifying his own capabilities and limitations in relation to remembered events, it seems important that he does so in conversation, in a way that allows corroboration by his mother. His rememberings are not simply perceptual *recollections*, but verbal accounts, *versions* of the past whose nature and relevance to the present are subject to vetting and validation by others.

In a similar episode (sequence 12), another boy, Michael (aged 5:9), looks at a picture and sees in it the same issue as Paul did:

Sequence 12: Michael beat Scott

MOTHER: Who's that? MICHAEL: Scott and me/ and Scott's just behind me/ and I won Scott/ didn't I? Didn't I Mum? MOTHER: No you didn't./ You have to say I/ I beat Scott or/ I was before Scott. MICHAEL: I was before Scott wasn't I Mum? MOTHER: Mm.

Of course, the outcome of peer conflicts need not always be favourable. What happened in the past is only very partially depicted in pictures, and remains open to whatever version can be offered for it. In sequence 13 Michael is asked to explain his apparent non-intervention when, looking at a photograph of a sand castle he had constructed on the beach, he recalls that some boys afterwards came and destroyed it. This is news to his mother, who seeks to establish with him a common understanding and explanation of events.

Sequence 13: Michael's sand castle

MICHAEL: On that one/ when we took the flags out/ some boys came to look for (...) and they stood round the sand castle and/ and erm/ jumped right in the middle of it.
MOTHER: They didn't did they?/ Were you there?
MICHAEL: No/ not on the beach but I was half way up the steps.
MOTHER:Oh/ did you shout at them?
MICHAEL: No.
MOTHER: Why not?
MICHAEL: I/ I didn't think they would stop doing it if I shouted.

Probably the most important relationships remembered and interpreted were those between the family members themselves. The presence of siblings in most of the recorded conversations provided for expressions of rivalry and support, comparison between them and projections of what the children used to be and may later become, as well as efforts at socialization and control, by the mothers. The thing of interest to us was the way in which the content of what was *remembered*, and the sense made of it, was a function of its significance for these relationships. Michael (5:9) and Katie (3:6) were engaged throughout the session (and apparently throughout the rest of their relationship) in a lot of sibling rivalry. This was evident in our data, both in the photographic record, and in the process of viewing them (sequence 14).

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Sequence 14: Sibling rivalry
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MICHAEL: That's you (...)/ you were damaging my things weren't you? KATIE: Yes.// Look there's (...) MICHAEL: I wish Katie wouldn't touch my metal spade. MOTHER: Why not? MICHAEL: It's dangerous for HER.

The depicted event is seen by Michael in terms of his relationship with his sister. His appeal to his mother to support his case is a recognition of her overall supervisory and adjudicating role. Indeed, his mother also makes use of depictions of the past to construct versions of it that suit her own purposes, as peacemaker between them. Taking advantage of one of the pictures she remarks:

Sequence 15: Remembering as socialization

MOTHER: That's nice. You look as though you're talking to Katie. MICHAEL: Ugh// DON'T. MOTHER: Don't you?

Children's identity and relationships change through time, and it is an important part of the developmental process that children come to see themselves as growing and changing. This involves making sense of the past, of what one has been, and of the future, what one may become. Family photographs are a powerful mediator of such perspectives, especially when they are taken up in conversation with parents and siblings, and become the basis of comparisons and reactions shared between the people concerned. In sequence 16, which includes two almost consecutive exchanges about different pictures, Paul and Rebecca are confronted by some old photographs from when Paul was an infant in nappies (diapers).

Sequence 16: Paul as a baby

MOTHER: Can you remember these?

REBECCA: Look there's Paul when he's got a nappy on. (*Mother laughs.*) You've got a nappy on. Paul looks like you've got a white nappy on.

PAUL: Is it my pants?

MOTHER: Well no/ I think you were still wearing nappies then/ 'cause it was very hot and you didn't need to wear anything other than/ nothing or just your nappy. (\ldots)

(Looking at another photograph)

REBECCA: Look at Paul/ he's still wearing his little nap naps./ He's got long golden hair./ He was sweet then.

MOTHER (Laughing): THEN!
REBECCA: He's more nicer than now./ I mean he was more nicer when he was a baby wasn't he?
MOTHER: Do you think so?
REBECCA: Mm. (Coughs.)
MOTHER: What do you think Paul?
PAUL: No.
MOTHER: No. (Laughs.)

These children, like the others in our data, took a particular interest in seeing what they and their family looked like in other contexts (such as on the beach, undressed, with mummy bathing topless and daddy with 'hairy legs'), and what they looked like at an earlier age, reacting mainly with amusement, and making evaluations of the changes, comparing each other and sometimes mocking each other's earlier immaturity. The pictures and the conversational rememberings provided for a kind of family forum in which personal identities, varieties of situational contexts, social relationships and the milestones of developmental change could be marked, interpreted and communicated, becoming the basis of an articulated family history. Transactions with other people, friends and strangers, and with significant objects, were similarly noted and recalled, but always with a view to their relevance to the rememberer: 'There's me holding Catherine. That's my only doll that I bought on holiday' (Rebecca); '... She's called Diamond ... and she's my friend' (Justine).

Sometimes these identities and relationships were not immediately recalled on the basis of the pictures alone, but had to be constructed jointly with another's help. In sequence 17 Rebecca seeks her mother's help in sorting out the identity and relationship of a forgotten holiday friend.

Sequence 17: Rebecca's holiday friend

REBECCA: Mummy Rebecca and? (*Pointing to girl in picture with herself.*) MOTHER: Natisha/ a little girl/ I think that's/ I think that was her name. REBECCA: Natisha. MOTHER: Do you remember playing with her? REBECCA: Natisha/ Natisha/ is she my friend? MOTHER: Yes. REBECCA: Did she know Paul? MOTHER: Erm well yes but she/ you two played games together./ She was a French girl and although you didn't speak each other's language/ you still got on well. (... Paul and Rebecca's father enters the room.) REBECCA: Dad here's me with my friend/ at France. FATHER: (...) Oh yes. What's her name? REBECCA: (...) Natisha.

Rebecca's opening question is notably elliptical. We are towards the end of the recorded session, and the basic communication frame of identifying persons, settings, relationships and relevances is now well established. Her mother provides the necessary information, who the girl was and her relationship to the two children, and on her father's entrance Rebecca is able to convey these things to him the setting is the holiday in France, and there is me, Rebecca, with my friend Natisha. It is now all common knowledge.

The provision of information by her mother, the particular nature and significance of that information, and Rebecca's picking it up and passing it on to her father, constitute an example of an important, though rather obvious aspect of joint remembering. People convey knowledge to each other, remind each other of things, exchange versions of scenes and events that establish the common content of a shared past. This is only the more obvious aspect of what children may be learning from their parents (and parents from their children — the flow of information and explanation was not always from parent to child). It is also possible to see the parents as modelling for their children the remembering process itself — the criteria of memorability, the relatedness of events, the affordances offered by photographs for reconstructing the past and even a meta-mnemonic awareness of it all. We shall examine these things next.

Modelling, scaffolding and learning remembering

We shall begin by looking at what we have called the 'learning environment', that is, the information about how to remember that is contained within the mother's speech. Then we shall see what evidence there is to support the notion that the children were actually picking up and using this information. In Vygotskian terminology, we are examining the 'zone of proximal development', the leading edge of communicative learning in which the child acquires the language-based 'higher mental functions'. Vygotsky defined the zone of proximal development as the difference between the children's 'actual developmental level as determined by independent problem solving', and their level of 'potential development as determined through problem solving under adult guidance or in collaboration with more capable peers' (1978: 86).

One of the major characteristics of adult remembering is the use we make of context and contextual inference. If we want to remember what we ate for dinner on some evening three months ago, it helps if we can reconstruct a context for the event — our eating habits on particular nights of the week, who we were with, whether it was a special occasion, where we were, and so on. We use such contexts inferentially — if it was Friday, then I was probably eating out, and so on. The important characteristic of conversational remembering is that speakers do not present each other only with the results of such contextual inferences, that they ate chili con carne that night, but they also articulate the process of contextual inference — they speak it out loud. When parents do this with their young children, they are demonstrating to them how to remember. Let us look at some examples.

Sequence 18: Modelling contextual inference

- (1) With Helen (aged 2:3) and Sandra (4:11)
- MOTHER: Who's that?
- HELEN: I don't know.
- MOTHER: Do you know where you were there?
- HELEN: (. . .)
- MOTHER: Whose house were you at there?/ Do you recognize ... (...) (Looking at another picture.)
- SANDRA: Look there's Mummy on a boat/ I didn't go on boat (. . .) 'cause look there's $f(\dots)$
- MOTHER: LOh yes. I bet that was in Liverpool when we went on the ferry ferry boat.
- (2) With Paul (4:3) and Rebecca (5:10)
- MOTHER: Do you remember being on this beach?
- PAUL: Yuk// No.
- MOTHER: Don't you/ when we went to Jersey/ on the aeroplane// do you not remember that?
- PAUL: Is that Jersey?
- MOTHER: Mm/ look Rebecca's wearing a hat that says Jersey on it. (...) (Looking at another picture.)
- PAUL: Look/ what is that?
- MOTHER: (...) probably a book. We were going to go on that/ boat/ for a trir down the river/ and we took one or two books to keep you two occupied.

The examples in sequence 18 are typical of many other such exchanges, in which the children could not recall something, and the mother then proceeds to invoke contextual reminders as an aid to recall. Both mothers express directly the inferential, reconstructive basis of the process — 'I bet that was in Liverpool', 'probably a book ... '. Paul's mother offers him the evidence afforded by the picture for concluding that they were on holiday in Jersey — the name of the place was written on his sister's hat. Now, despite our shorthand use of the term so far, it is not merely the case that these mothers were *modelling* contextual inference. They were doing more than that. Rather than just speaking aloud as they themselves remembered things, they were actively engaged in their children's rememberings, using contextual reminders and inferences to help them to remember. Indeed, this is precisely what distinguishes mere 'modelling' from the interactive, scaffolded learning that takes place in the zone of proximal development. This also was typical of the rest of our data — the mothers' major concerns were not simply with their own reminiscences, but with sharing memories with their children, and in doing so they articulated for their children the bases and criteria which the children themselves could use in remembering things. Many of the mothers' elaborations of a remembered event, in the deixis-depiction-significance sequences, were of this sort - elaborations of context, and contextual inferences that verified or validated a particular version of events that was at issue with their children. In sequence 18 Paul's mother overtly demonstrates how recall can be justified on the basis of contextual inference and argument, and in doing so appeals to one of the major issues of mnemonic content that we discussed earlier --- family relationships ('... to keep you two occupied').

While it is clear that these processes and criteria of remembering were embodied in the mothers' speech, we have yet to show that the children were actually learning anything from these demonstrations. One thing is clear, that at least by the age of four the children were able to draw upon inferences and arguments of their own, at least when the evidence was directly available to perception, and did not itself have to be recalled. Asked how old he was in a birthday party picture, Paul worked it out by counting the candles on his cake – 'One/ two/ three/ THREE?'

Perhaps the most likely clue to how the children might pick up this notion that you can remember things through inference and argument was the fact that, while their own unaided rememberings remained almost exclusively simple, factual instances, they did engage in inferential reconstruction communicatively, in overt argument with their mothers. These were occasions when the 'scaffolding' metaphor again seems appropriate; the children's inferences and arguments were prompted by the mothers' questions, directed at getting the children to *account* for, or supply the grounds for, any disputed or non-obvious version of things. In interaction with their mothers they were able to achieve jointly what they could not manage on their own.

Sequence 19: Arguing versions of the past

MICHAEL: There's/ there's a seagull landing on the sea. KATIE: Yeh/ there's **r** another. MICHAEL: He's going to catch some fish. MOTHER: He's got his mouth open/ he's got his beak open there look/ hasn't he? MICHAEL: Yeh/ and/ he's flew out with some fish. MOTHER: I can't see any fish/ can you? MICHAEL: Yes (pointing). KATIE: Yes. MOTHER: That's his wing. MICHAEL: Oh// he must have dived to get some fish and not got any./ Hey/ that that bit/ up to there must be his fish/ [on his wing. No/ no can't see./ No they don't MOTHER: carry a fish on their wing/do they? MICHAEL: No/ I know/ but it might be in his mouth that black bit/ no it's too high. MOTHER: It must have dropped it.

It is important to note that, strictly speaking, sequence 19 is not so much a discussion of memory as of perception. The children, prompted by their mother's disagreements, arguments and questions, are trying to work out what the picture depicts, rather than what they remember to have happened. It is here that we see the importance of photographs as mediators of access to the past; the children are able to practise argument and inference in relation to the picture, without having to sustain such mental processes while engaged in maintaining some recalled image from past experience. It is a little like taking advantage of a flight simulator — they can learn about remembering without actually having to remember.

It is worth taking note of the mother's precise contribution. In her first utterance she explicates for Michael the evident grounds for his inference that the seagull was going to catch some fish — 'he's go his beak open' — and invites his agreement — 'hasn't he?' She seems to be concerned that inferential elaborations are both rational and public — shared by the three of them. Possibly it is important to her that the younger child Katie is made aware of the grounds for Michael's observation. Certainly this was an overt feature of many other exchanges where, having established a version of events with the older child, the mother checks whether the younger one agrees, understands, or also remembers things that way. In her other contributions she disputes and corrects their interpretations, invites them into arguments ('they don't carry a fish on their wing/ do they?'), and eventually offers a rationale for their unlikely but persistent conviction that the bird had been carrying a fish ('It must have dropped it').

Sequence 20 is from the same session as 19.

Sequence 20: Whose hand is it?

MOTHER: Who's that? (*Pointing to a partially hidden figure*) MICHAEL: It's me.

MOTHER: Well who's that/ there? (Pointing to another partially obscured figure, with protruding hand)

MICHAEL: My hand.

MOTHER: All right/ if that's you/ that can't be your hand.

MICHAEL: It must be Katie because this is my hand.

MOTHER: It's not. That's you (*pointing to first figure*)/ that's your (...) jogging bottom.

michael: Ah.

MOTHER (Pointing to second figure): That's Katie.

MICHAEL: Ah/ I had the idea of putting my hands out.

MOTHER: Did you?

MICHAEL: Yes/ and she shouldn't have done it when it was my idea.

MOTHER: Why not?

MICHAEL: Because it was MY idea.

Again, sequence 20 is essentially a dispute about what the picture depicts, rather than about a remembered event. As in the previous sequence, the argument is carried in Socratic fashion by the mother. Convinced at last of his mother's version of things, Michael offers his own rather weak rationale for having claimed to be both persons depicted. Consistently at pains to compete with his younger sister throughout the session, Michael now claims that the hand *should* have been his, because (and now he does go beyond the picture to draw upon a version of a remembered past), 'putting my hands out' had been 'my idea'. So, mediated by a picture and an open argument about what it depicts, Michael comes to invoke the past within this communicative framework of settling upon an agreed version of events, made sense of in terms of his rivalry with his sister.

As far as what the children were learning is concerned, we have probably reached with this sort of analysis the limits of what these data can tell us. Family conversations are a rich learning environment, in which children's efforts at remembering are taken up by parents in conversations that centre on elaborations and explanations of things, resolving disputes between people, invoking context and using inference to work out and justify particular versions of events. It is an active, or better still, inter-active environment, in which the mother takes pains to elicit perceptions, memories and judgements from the children, to explore them, elaborate them, contextualize them and assign significance to them. The context in which this joint remembering is embedded is one of significant relationships between people, of the dynamics of conversational interaction itself, but also the dynamics of family relationships, parental guidance and authority, sibling rivalries and the growth and changing of personal identities. These are the stuff of family rememberings, not only their prime content (what is remembered), but also the process of recall itself — defining the criteria that make things memorable, the criteria by which one memory may be linked to another, and the subordination of remembering to the working out of relationships.

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