

IN THE COURT OF APPEAL OF NEW ZEALAND

CA No. 120/98

BETWEEN

PETER HUGH MCGREGOR ELLIS

currently of Paparoa Prison
Prisoner

Appellant

AND

REGINA

Respondent

AFFIDAVIT OF MICHAEL ERNEST LAMB

Affirmed on Wednesday the 21st day of April 1999

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INDEX TO THE AFFIDAVIT OF MICHAEL ERNEST LAMB

1. Affidavit
2. Exhibit A: Curriculum Vitae of Dr Michael E. Lamb
3. Exhibit B: A copy of a letter dated 17 September 1998 from Dr Michael Lamb to Mrs Judith Ablett Kerr QC
4. Exhibit C: A copy of a letter from Detective Eade to the Christchurch City Council, dated 20 December 1991,
5. Exhibit D: A copy of Mr Sumach's original statement dated 22 July 1992
6. Exhibit F: A copy of a statement by Ms Lacebark dated 19 February 1992;
7. Exhibit G: A copy of a statement by Ms Lacebark dated 21 April 1992;

8. Exhibit H: A copy of a six page typed statement -of Ms Magnolia dated 14 September 1992 (numbered 040175),
9. Exhibit I: A copy of ten typed pages of Ms Magnolia's own notes (numbered 050210),
10. Exhibit J: A copy of a further four typed pages of Ms Magnolia's own notes (numbered 050217),
11. Exhibit K: A copy of a further seven typed pages of Ms Magnolia's own notes (numbered 050218),
12. Exhibit L: Bibliography for the research and authorities cited by Dr Michael E. Lamb;
13. Exhibit M: Table 1: Characteristics of interviews with children aged 6 years or younger
14. Exhibit N: Table 2: Informativeness of interviews with children aged 6 years or younger
15. Exhibit O: A copy of an Education Review Office Report dated 26-29 November 1991 entitled "*Civic Child Care Centre.*"

Separate: Exhibit E: A book entitled "A Mother's Story - *The Civic Creche Child Sex Trial*" by Joy Bander

AFFIDAVIT OF MICHAEL ERNEST LAMB

I, MICHAEL ERNEST LAMB of Bethesda, Maryland, United States of America, declare and affirm as follows:

INTRODUCTION

1. QUALIFICATIONS

- 1.1 I graduated with a Bachelor of Arts majoring in Psychology from the University of Natal, Durban (South Africa) in 1972, completed a Masters Degree at the John Hopkins University in 1974, gained a Master of Science degree and a Master of Philosophy degree from Yale University in 1975 and graduated with a Doctorate in Philosophy in 1976 (also from Yale University). I hold an Honorary Doctorate from the University of Goteborg (Sweden), awarded in 1995.
- 1.2 I have held the position of Assistant Professor of Psychology at the University of Wisconsin-Madison (June 1976 to August 1978) and at the University of Michigan (January 1978 to December 1980) and the position of Professor of Psychology, Psychiatry, and Pediatrics at the University of Utah (July 1980 to June 1987).
- 1.3 In addition I have held a number of positions as Visiting Professor, at the University of Haifa (Israel), University of Hokkaido, Sapporo (Japan), University of Osnabruck (Germany) and Martin-Luther University of Halle-Wittenberg (Germany).
- 1.4 Since July 1987 I have been employed by the United States Government as the Senior Research Scientist and Chief, Section on Social and Emotional Development at the National Institute of Child Health and Human Development.

- 1.5 I currently hold the following academic affiliations: Research Professor of Psychology (University of Virginia), Adjunct Professor of Human Development (Pennsylvania State University), Adjunct Professor of Psychology (University of Maryland, Baltimore County), Adjunct Professor of Education (University of Maryland, College Park), Adjunct Professor of Psychology (University of Utah) and Adjunct Professor (Catholic University of America).
- 1.6 Since 1979 I have held editorial positions for a number of Journals including Behavioral Assessment (1982-83), The Behavioral and Brain Sciences (1979- present), Child Development (1979-84, 1993-6), Developmental Psychology (1981-6; 1992-4), Early Education and Development (1989-93), Human Nature (1989-96), International Journal of Behavioral Development (1993- present), Journal of Adolescent Research (1986-97; 1998- present), Journal of Aggression, Maltreatment and Trauma (1997- present), Journal of Credibility Assessment and Witness Psychology (1996- present) and Social Development (1990- present).
- 1.7 I am an Editorial Consultant for the following Journals: American Psychologist; American Scientist; Applied Cognitive Psychology; Canadian Journal of Behavioural Science; Child Abuse and Neglect: The International Journal; Current Directions in Psychological Science; Developmental Psychobiology; Early Childhood Research Quarterly; Family Coordinator; Family Relations; Human Development; Human Organization; Human Relations; Journal of Applied Developmental Psychology; Journal of Child Psychology and Psychiatry; Journal of Consulting and Clinical Psychology; Journal of Experimental Child Psychology; Journal of Family Psychology; Journal of Personality and Social Psychology; Law and Human Behavior; Merrill-Palmer Quarterly; Pediatrics; Psychological Bulletin; Psychological Science; and Science.

- 1.8 I am a member of the American Professional Society on the Abuse of Children, the American Psychology-Law Society, a Fellow of the American Psychological Society, a member of the European Association of Psychology and Law, the International Society for Infant Studies, the National Council on Family Relations, Society for Research on Adolescence, and the Society for Research in Child Development. I am on the Executive Committee of the American Professional Society on the Abuse of Children's Maryland State Chapter, for which I Chair the Committee on Education and Training.
- 1.9 A developmental psychologist by training, I have been deeply involved for several years in research focused on the elicitation and evaluation of children's testimony about experienced events, particularly incidents of sexual abuse. Most of this research (publications from which are cited as relevant in this document and are listed on the Curriculum Vitae annexed hereto and marked with the letter 'A') has been conducted in field settings, where I have been fortunate to collaborate with and train many investigative interviewers -police officers, social workers and youth investigators mandated to investigate and prosecute alleged abuse - in Israel and parts of the United States. Comparable demonstration projects have been initiated more recently in the United Kingdom and Sweden. I am the author of a number of articles and a book that set Guidelines for use in the interviewing of children.

THE CASE OF REGINA v ELLIS

2. I was contacted on 28 May 1998 by Counsel on behalf of Mr Peter Ellis and asked to provide my opinion on various aspects of the case against Mr Ellis. I was also asked to review four reports prepared by Dr Barry Parsonson, entitled:

- (1) *"The interviewing of children: Effects of question form, props, question repetition and repeated interviews on the accuracy of children's reports. A review and commentary in respect of the Christchurch Civic interviewing and interviews"* ;
- (2) *"Children's Memory: A brief review of development"*-
- (3) *"Comment on the probability of contamination in "disclosures" obtained from children in the case of R v Ellis."*; and
- (4) *"Retraction of allegations of abuse by children"*

which I understand were submitted in support of Mr Ellis' First Petition to the Governor General. I understand these reports are produced in the Affidavit of Dr Parsonson to the Court of Appeal as exhibits B, C, D and E respectively.

3. It was and remains my view that those four documents provide an accurate summary of the empirical and scholarly literature available at the time that Dr Parsonson wrote his reports. Although I use some terminology differently and could point to more recent research than that cited by Dr Parsonson, it is my view that his overall conclusions are accurate and consistent with more recent research, as well as that cited in his reports. I annex hereto and mark with the letter '**B**' a copy of my letter dated 17 September 1998 which outlined my support for the work of Dr Parsonson.

4. In addition to providing a review of the work of Dr Parsonson I have considered two main aspects of the case against Mr Peter Ellis, namely, the investigative interview procedures adopted in the case and the effects of contamination on the children's allegations regarding "Mr Peter Ellis.

5. I have had access to the following material:
 - (1) Copies of the video-interviews and transcripts of video interviews for the following children: Molly Sumach (92/261); Kari Lacebark (92/119; 92/139; 92/626; 92/82; 92/83; 92/630); Bart Dogwood (92/474; 92/628; 92/471; 92/479; 92/263); Tess Hickory (92/300; 92/467; 92/242); Zelda Cypress (92/172; 92/183; 92/302); Lara Palm (92/96; 92/694; 92/594) and Eli Laurel (92/163; 92/230; 92/629); and the transcripts of the video interviews for Ryan Matai (92/314; 92/344).
 - (2) A copy of the notes of evidence at Trial of Dr Karen Zelas;
 - (3) A copy of the notes of evidence at Trial of Ms Susan Sidey;
 - (4) A copy of the notes of evidence at Trial of Ms Ngaire Morgan;
 - (5) A copy of a letter from Detective Eade to the Christchurch City Council, dated 20 December 1991, a copy of which is annexed hereto and marked with the letter 'C' ;
 - (6) A copy of a New Zealand Police Report Form of Detective Eade dated 19 March 1992;
 - (7) A copy of a New Zealand Police Job Sheet of Detective Eade dated 7 April 1992;

- (8) Copies of hand-written notes made by the New Zealand Police dated 23 April 1992;
- (9) Copies of further hand-written notes dated 24 April 1992;
- (10) Copies of further hand-written notes dated 28 April 1992;
- (11) A copy of a hand-written diary entry made by New Zealand Police dated 2 July 1992;
- (12) A copy of a New Zealand Police Report Form of Detective Senior Sergeant Ell dated 7 July 1992;
- (13) A copy of a New Zealand Police Report Form of Detective Inspector Broad dated 15 July 1992;
- (14) Copies of notes of 12 August 1992 Meeting of the Civic Creche Inquiry Team;
- (15) A copy of an unsigned statement of Mr Colin Eade dated 22 December 1997;
- (16) A copy of a signed statement of Superintendent Carson dated 28 January 1998;
- (17) A copy of signed a statement of unidentified Social Worker dated 3 February 1998;
- (18) A copy of **Mr Sumach's** original statement dated 22 July 1992, a copy of which is annexed hereto and marked with the letter '**D**' ;
- (19) A book entitled "*A Mother's Story - The Civic Creche Child Sex Trial*" by Joy Bander, who I understand to be **Ms Dogwood**, the mother of the complainant **Bart Dogwood**. The book was published by A Howling at the

Moon Productions in December 1997 and a copy is annexed hereto and marked with the letter 'E';

- (20) I have had access to copies of statements made by Ms Lacebark, the mother of the complainant Kari Lacebark, dated 19 February and 21 April 1992 together with copies of a series of notes made by Ms Lacebark (45 pages long) typed by the Police and produced at the preliminary hearing; deposition testimony from both the preliminary hearing and at trial. I annexe hereto and mark with the letters 'F' and 'G' respectively copies of the statements of 19 February and 21 April 1992;
- (21) A copy of the notes of evidence at Depositions of Ms Magnolia, the mother of Geoffrey Magnolia, she being the first person to make a complaint;
- (22) A copy of a six page typed statement of Ms Magnolia dated 14 September 1992 (numbered 040175), a copy of which is annexed hereto and marked with the letter 'H';
- (23) A copy of ten typed pages of Ms Magnolia's own notes (numbered 050210), a copy of which is annexed hereto and marked with the letter I;
- (24) A copy of a further four typed pages of Ms Magnolia's own notes (numbered 050217), a copy of which is annexed hereto and marked with the letter 'J';
- (25) A copy of a further seven typed pages of Ms Magnolia's own notes (numbered 050218), a copy of which is annexed hereto and marked with the letter 'K';
- (26) A document entitled "Time-Line" prepared by Mrs Judith Ablett Kerr QC

- (27) A copy of a Report by the Education Review Office entitled, "Civic Child Care Centre" dated 25-29 November 1991.

INVESTIGATIVE INTERVIEWS AND CONTAMINATION IN THE CASE OF R v ELLIS.

6. In this part of my affidavit I provide my expert opinion on the two aspects of the case that I have considered/ namely, the investigative interview procedures and the effects of contamination on children's allegations. Annexed hereto and marked with the letter "L" is the bibliography for the research and authorities that I cite.

INVESTIGATIVE INTERVIEW PROCEDURES IN THE CASE OF MR PETER ELLIS

7. I will deal with this aspect of my expert opinion in the following way:
- (1) Introduction
 - (2) Factors Influencing Children's Competence
 - (a) Fantasy
 - (b) Language and Communicative Abilities
 - (c) Memory
 - (d) Suggestibility
 - (3) Research on Investigative Interviews
 - (4) Conclusion

INTRODUCTION

8. I am familiar with and have reviewed relevant portions of the research literature and used it to assist in my evaluation of the interviews conducted by those investigating the alleged mistreatment of several young children by Peter Ellis. My commentary is informed by a close review of the transcribed

interviews and of the documentation presented for my review as well as by my familiarity with this area of research.

9. Many researchers have studied the capacity of young children to provide reliable and valid information about their experiences, with a noteworthy flood of books published in the last decade (e.g., Ceci & Bruck, 1995; Ceci, Leichtman, & Putnick, 1992; Ceci, Ross, & Toglia, 1989; Ceci, Toglia, & Ross, 1987; Dent & Flin, 1992; Doris, 1991; McGough, 1994; Perry & Wrightsman, 1991; Poole & Lamb, 1998; Spencer & Flin, 1991). The recent research has been increasingly specific in focus and has been especially helpful to interviewers such that published studies offer increasingly valuable information and insights to forensic interviewers and to those attempting to evaluate children's testimony in legal and judicial contexts (e.g., Parker, 1995; Warren & McCloskey, 1997; Saywitz, Synder & Nathanson, in press; Flin, Boon, Knox, & Bull, 1992; Poole & Lindsay, 1997; Cassel, Roebbers, Bjorkland, 1996; Westcott, Davies & Horan, 1998; Ricci, Beal & Dekle, 1996; Bull, 1992; 1995; 1996). In this section, I focus on the implications of the research for evaluation of the claims made by those children who were allegedly abused by Peter Ellis. Because detailed reviews have already been submitted by Dr. Parsonson, this review is intentionally not exhaustive in its focus.

10. My goal is to summarize our current understanding of the factors that influence children's ability to provide accurate information about events they have experienced. My focus here is thus on the empirical literature concerned with the development of social, communicative, and memory capacities, discussed with respect to its relevance to forensic interviewing in general, and with particular relevance to the Ellis case. I then describe research designed to determine how well investigative interviewers comply with the recommendations drawn from the empirical literature. In this context, I describe systematic analysis of the Ellis interviews using the same codes and

measures used in our published research. This exercise makes it possible to compare the Ellis interviews and interviewers with average and superior interviews conducted elsewhere.

FACTORS INFLUENCING CHILDREN'S COMPETENCE

(a) Fantasy

11. The widely held belief that young children may fantasize about or fabricate allegations of a sexual nature is frequently used to cast doubt on their testimony, even though children over six years of age appear similar to adults in their ability to discriminate between events of internal ('imagined') and external ('experienced') origin (Johnson & Foley, 1984; Lindsay & Johnson, 1987; Roberts & Blades, 1995), and the fantasy lives of children and adults are actually much more similar than was previously believed (Woolley, 1997). Children under 6 years of age may have more difficulty with such discrimination, and thus the children in this case were of an age at the time of the alleged events that they might have had difficulty distinguishing between memories of actual and imagined events (Parker, 1995; Welch-Ross, 1995).
12. It is also important to distinguish among fantasy, distorted recollections, deceit or falsehood, and instances in which children are the unwitting or witting tools of anxious, manipulative, or vengeful adults. Fabrication and false reporting are unrelated to the ability to discriminate between imagined and real events, although these constructs are frequently confused in popular debates about children's credibility and competence.
13. Fantastic elements seldom appear in children's accounts of abuse (Dalenberg, 1996), and when they do, they are often elicited by the presence of props (such as toys or dolls) usually associated with fantastic play (Lamb, Sternberg, & Esplin, 1994, 1995), or by

interviewer suggestions that children "imagine" or "pretend". As a result, forensic investigators have been urged to avoid having such props present during investigative interviews and to avoid using such expressions (e.g., Bruck, in press; Lamb, Sternberg, Esplin, 1995, 1998; Poole & Lamb, 1998). It is thus unfortunate that the Ellis interviewers frequently chose to let the children play or draw during the interviews, although this deviation from recommended practice did not appear to generate high levels of obvious fantasy, it was clearly associated on occasion with inattention to the serious investigative business at hand, however.

(b) Language and Communicative Abilities

14. Although most children say their first word by early in the second year of life, begin to create two-word sentences by 20 months, and can draw upon an average vocabulary of 8000 to 14000 words by the time they turn six (Carey, 1978), linguistic and communicative immaturity clearly impede forensic interviewing if only because so few interviewers seem to recognize and understand the gradual pace of communicative development.

15. Even infants can discriminate between various speech sounds, but children often fail to produce all the sounds of their native language in diverse contexts until after they begin attending elementary school (Bornstein & Lamb, 1992; DeVilliers & DeVilliers, in press). In addition, children do not articulate individual sounds consistently even after they seem to have mastered them (Reich, 1986), and thus it is not uncommon for interviewers to misunderstand children's speech. Misunderstandings also occur because children's rapid vocabulary growth often leads adults to overestimate their linguistic capacities. Despite their apparent maturity, young children—especially preschoolers—frequently use words before they know their conventional adult meaning, use words that

they do not understand at all, and may understand poorly some apparently simple concepts, such as "any", "some", "touch", "yesterday", and "before" (Hamer, 1975; Walker, 1994).

16. In general, the vocabularies of young children are often much more limited and less descriptive than those of adults (Brown, 1973; Dale, 1976; de Villiers & de Villiers, in press). Adjectival and adverbial modifiers are especially likely to be absent in their accounts, which tend to be extremely brief and sparse (Marin, Holmes, Guth, & Kovac, 1979), perhaps in partial reflection of children's slow syntactical development. Unlike adults and older children, furthermore, young children cannot draw upon an array of past experiences to enrich and clarify their descriptive accounts (Johnson & Foley, 1984).
17. In the process of learning words and the rules for combining words into sentences, children are also learning how to participate in conversations and how to structure story narratives (Warren & McCloskey, 1997). As most parents know, children's conversations often lack the logical structure that adults expect, and loose associations and digressions are common. Individual differences are large and developmental changes rapid, however, and interviewers must thus be attentive to the abilities and idiosyncrasies of their conversational partners. The challenge confronting investigators is to obtain accounts that are sufficiently rich in descriptive detail to permit an understanding of the children's testimony. Poole and Lamb (1998) describe a number of concrete strategies that interviewers might adopt to overcome some of the communicative problems that frequently bedevil interviewers.

Language and Communicative Abilities and the Accuracy of Children's Accounts

18. As shown in greater detail below, the accuracy of children's accounts is greatly influenced by the linguistic style and the complexity of the language addressed to them by investigators. Interviewers often implicitly and inappropriately ask children to negate adult statements (e.g., "Is it not true that...?"), expect them to understand passive rather than active sentences, use words that are unfamiliar to children, construct syntactically complex or ambiguous compound sentences, ask children questions they are simply incapable of answering, or ask children to confirm multifaceted "summaries" of their accounts (Dent, 1982; Pea, 1980; Perry & Wrightsman, 1991; Saywitz, 1988; Walker, 1993; Walker & Hunt, 1998; Warren, Woodall, Hunt, & Perry, 1996). Roberts and Lamb (in press) showed that when interviewers misrepresent what children say, they are infrequently corrected, and thus if anything the mistaken, rather than the correct, information is recalled later in the interview. In addition, systematic analyses show that, far from being exceptional, inappropriate questioning- strategies characterize the vast majority of forensic interviews (e.g., Lamb, Sternberg, Boat, & Everson, 1996; Lamb, Hershkowitz, Sternberg, Esplin, Hovav, Manor, & Yudilevitch, 1996; Sternberg, Lamb, Hershkowitz, Esplin, Redlich, & Sunshine, 1996; Warren et al., 1996).

Children's Accounts of Abusive Experiences

19. Children's accounts of abusive experiences are also influenced by social or pragmatic aspects of communication. Like adults, young witnesses are typically unaware of the amount and type of information being sought by forensic investigators. As a result, interviewers need to communicate their needs and expectations clearly, motivating children to provide as much information as they can. Saywitz and her colleagues (e.g., Saywitz, Snyder, &

Nathanson, in press) and my colleagues and I (Sternberg, Lamb, Hershkowitz, Yudilevitch, Orbach, Esplin, & Hovav, 1997) have shown that it is often valuable to explicitly train young witnesses to provide detailed narrative responses before starting to discuss the substantive issues under investigation. In addition, open-ended questions such as "Tell me everything about that", "Tell me about that from the very beginning", or "Tell me the first thing that happened when you got to [location identified by the child]" encourage children to provide full accounts of their experiences. Interviewers can request additional information by using open-ended prompts such as "Tell me more about [something mentioned by the child] or "And then what happened". Such open-ended questions and prompts can be used repeatedly until interviewers are satisfied with the scope of information provided.

20. Years of analyzing forensic interviews have led my colleagues and I, along with forensic linguists such as Walker (1993) and Walker and Hunt (1998), to question widespread assumptions about children's linguistic inabilities and to focus more on the competence, perspective-taking abilities, and linguistic styles of investigators. The more impoverished the children's language, the greater the likelihood that their statements will be misinterpreted or that children will misinterpret the interviewers' questions and purposes (King & Yuille, 1987; Perry & Wrightsman, 1991; Walker, 1993). This further underscores the extent to which the interviewers' behavior - particularly their vocabularies, the complexity of their utterances, their suggestiveness, and their success in motivating children to be informative and forthcoming—profoundly influences the course and outcome of their interviews. It is for this reason that I focus so extensively in this document on the interviewers' behavior; simply put, the ways in which interviewers seek information from children have a major impact on the quality of that information.

(c) Memory.

Recall versus Recognition

21. When evaluating children's memory capacities and the ways in which memories are accessed in forensic interviews, the distinction between recall and recognition testing is crucial. If adults and children are asked to describe events from free recall ("Tell me everything you remember..."), their accounts may be brief and sketchy, but are more likely to be accurate. If prompted for more details using open-ended prompts like "Tell me more about that" or "And then what happened?", children often recall additional details. If interviewers prompt with focused questions such as "Did he have a beard?", "Did he touch you with his private", or "Did this happen in the day or in the night," however, they shift from recall to recognition testing, and the probability of error rises dramatically (Dent, 1982, 1986; Dent & Stephenson, 1979; Gates & Shrimpton, 1991; Peterson & Bell, 1996). Effective interviewers must maximize the reliance on recall memory by offering open-ended prompts so as to minimize the risk of eliciting erroneous information. Recall memories are not always accurate, of course, especially when the events occurred long before the interview or there have been opportunities for either pre- (Leichtman & Ceci, 1995) or post-event contamination (Leichtman & Ceci, 1995; Poole & Lindsay, 1995, 1996; Poole & White, 1993; Warren & Lane, 1995) but accounts based on recall memory are much more likely to be accurate than those elicited using recognition cues or prompts.

22. Research on memory development suggests that, as children grow older, the length, informativeness, and complexity of their recall memories increase, but the basic structure remains the same (Davies, Tarrant, & Flin, 1989; Flin et al., 1992; Nelson & Gruendel, 1981; Saywitz, 1988). In general, young children tend to provide briefer accounts of their experiences than do older children and adults but their accounts are quite accurate (e.g.,

Goodman & Reed, 1986; Johnson & Foley, 1984; Marin et al., 1979; Gates & Shrimpton, 1991). As time passes, information is forgotten by children just as it is forgotten by adults (Flin et al., 1992). Errors of omission are much more common than errors of commission among both adults and children (Gates & Shrimpton, 1991; Steward, 1993), but are a special problem where children are concerned because their accounts-especially their recall narratives-are often so brief.

Remembering: Retrieval and the Effects of Delay

- 23 Even when events are remembered, the process of retrieval is complicated and delay is clearly influential. Flin and her colleagues (Flin et al., 1992) reported that 6-year-old children reported less information than 9-year-old children and adults and that, like adults, 6- and 9-year-olds reported less information five months after the event. Interestingly, the amount of incorrect information retrieved did not increase over time. Memory is a constructive process, however: Like adults, children actively work on memory traces in order to retrieve and organize them. Thus when children are repeatedly interviewed, as is often the case when sexual abuse has been alleged, this is likely not only to consolidate the memory (facilitating subsequent recall) but also to shape it (Omstein, Larus, & Clubb, 1992). In a recent field study of investigative interviews, Lamb, Sternberg, Esplin, and Chadwick (1998) found that both delay and age affected the amount of information recalled, although in that study it was of course impossible to assess the accuracy of the children's accounts.
24. Errors of omission become increasingly common as time passes, of course, and this is an especially important issue in the case of Peter Ellis. The investigative interviews I reviewed were conducted an average of more than 18 months after the last date on which the alleged offenses could have taken place and such extended delays (nearly a quarter of these children's lives) have

serious implications for those attempting to understand the children's alleged experiences. First, the delays should have facilitated extensive forgetting, making the accounts sketchy. In response, second, we might expect interviewers to ask more focused questions, which are more likely to yield erroneous responses. Third, delay increases the likelihood that children will be misled by suggestive questioning and will come to incorporate erroneously suggested details into their accounts of alleged events (Ceci & Bruck, 1993, 1995). All of these factors thus limit the quality and quantity of the information provided by Ellis' accusers and the risks are even greater when we focus on the trial testimony (which was provided even later) rather than the testimony provided in the video-recorded interviews I reviewed.

Script Memories

25. Whenever events recur with any regularity, both children and adults tend to blur distinctions among incidents and establish script memories (representations of averaged or typical events rather than particular incidents). Accounts based on script memories are likely to contain fewer distinctive details than are memories of discrete incidents (Nelson & Gruendel, 1981), and the passage of time between experience and recall increases the tendency to rely on scripts (Myles-Worsley, Cromer, & Dodd, 1986). Scripts are useful because they help individuals to focus on and remember the important features of repetitive events or sequences while enabling them to ignore less central or repetitious elements (Nelson, 1986; Shank & Abelson, 1977). In addition, scripts may provide the temporal sequence or structure that makes the accounts of specific experiences more comprehensible.
26. Scripts (like stereotypes) have disadvantages too, however, because they tend to be brief or skeletal and may incorrectly incorporate general knowledge about a class of events into

reports of specific events. For example, the 5- and 6-year-olds studied by Martin and Halverson (1983) remembered incorrectly the gender of a character who played a non-traditional gender role, while 5- and 7-year-olds studied by McCartney and Nelson (1981) embellished restatements of stories with items and events that were part of their own scripts. The tendency to do this generally declines with age (Collins, 1970; Collins & Wellman, 1982; Collins, Wellman, Keniston, & Westby, 1978), and script-based errors can be reduced by pre-interview counselling or instruction (Saywitz & Snyder, 1993). Children also tend to remember unusual events better than specific events that are congruent with their general or script memories (Davidson, 1991). In investigative contexts, children may nonetheless provide scripted accounts because they are unaware of the level of detail needed by forensic investigators. Interviewers must thus communicate their needs for narrative accounts of specific incidents and motivate children to be maximally informative witnesses. When children were abused more than once, interviewers can focus the child on specific events by using questions like "Tell me about the last time" or "Tell me about the time in Peter's house."

27. Although some of the children interviewed in the Ellis case reported hundreds of incidents, these assertions do not appear to have been taken seriously. Ellis was ultimately accused by the children and charged with unique incidents rather than incidents reported to have been so frequent that the children should have been expected to develop scripts. The impoverished nature of the children's recall accounts (see below) thus cannot be attributed to the development and production of skeletal scripts rather than detailed narrative accounts of discrete events.
28. It is also important to distinguish between memory performance and memory "capacity. Young children's accounts may be brief not only because their memories are poor or because their

limited experiences do not provide a rich network of associations from which to draw analogies or metaphors but also because their vocabularies are much more limited and less elaborate than those of adults and because they may not be motivated to reveal what they do remember.

Memory and Stress

29. Forensic investigators often dismiss the relevance of experimental research on children's memory by arguing that the stressful nature of sexual abuse makes memories thereof distinctly different. In fact, considerable controversy persists in the experimental literature concerning the effects of increased arousal or stress on the accuracy of children's memory. Deffenbacher (1983) concluded that "forensically-relevant" (i.e., high) levels of stress were associated with diminished accuracy, but the relevance of this conclusion to children's testimony is often disputed. Some researchers argue that stress improves children's accuracy (Goodman, Bottoms, Schwartz-Kenney, & Rudy, 1991; Goodman, Hirschman, Hepps, & Rudy, 1991; Ochsner & Zaragoza, 1988; Steward & Steward, 1996). Steward and Steward (1996), for example, reported that children's ratings of distress were correlated with the completeness and accuracy of their descriptions of medical examinations they had experienced. Other researchers (Gates & Shrimpton, 1991; Ornstein, Gordon, & Larus, 1992; Peters, 1987, 1991; Peters & Hagan, 1989; Peterson & Bell, 1996; Vandermaas, 1991) reported that arousal either reduced accuracy or had no effect, however. In most of these studies, unfortunately, the children experienced low levels of stress and the ability to recall central elements of experienced events was not assessed. In addition, researchers have not yet studied the effects of stress at the time of recall, although some have studied the effects of social support, which presumably reduces stress (Greenstock & Pipe, 1996; Moston & Engelberg, 1992).

30. Children are certainly more likely to remember personally meaningful and salient as opposed to meaningless items and events (see Omstein et al., 1992, for a review) but this does not mean that incidents of maltreatment will necessarily be recalled better. First of all, not all incidents of sexual abuse are painful or traumatic, and thus the potentially facilitative effects of arousal on the process of encoding information cannot be assumed. Second, the context in which the child is asked to retrieve information about the experienced event—during interviews with a child protective services worker, a policeman, an attorney, or a judge—may be stressful regardless of whether or not the target event was (Goodman, Taub, Jones, England, Port, Rudy, & Prado, 1992). Third, stress may affect different types of memory encoding and retrieval (e.g., recall, recognition, and reconstructive memory) in different ways.

Conclusion: Memory

31. In sum, although children clearly can remember incidents they have experienced, the relationship between age and memory is complex, with a variety of factors influencing the quality of information provided. Research also suggests that, in practice, the interviewers' ability to elicit information and the child's willingness and ability to express it can be as significant as the child's ability to remember it.

(d) Suggestibility.

32. Whatever the vagaries and strengths of children's memories, the competency of child witnesses is often doubted on the grounds that children are too susceptible to influence by misleading questions or other sources of misinformation (Ceci & Bruck, 1993, 1995; Ceci et al., 1987b). Suggestibility is a multifaceted concept that involves social, communicative, and memory processes. Children may respond inaccurately because they: a) infer that the interviewer would prefer a particular

response (Ceci & Bruck, 1993), b) do not understand the questions, but are eager to be cooperative (e.g., Hughes & Grieve, 1980), c) retrieve the most recently acquired information about the event in question, although they might be able to retrieve information about the actual event if prompted to do so (Newcombe & Siegal, 1996, 1997), or d) suffer from genuine source-monitoring confusion that prevents them from discriminating between the original event and misinformation about it (Poole & Lindsay, 1997).

33. Given the number of processes that underlie suggestibility, it is not surprising that the research literature appears at first glance both confusing and contradictory. Intense recent research has increased consensus, however, especially about the special susceptibility of preschoolers to suggestion (e.g., Ceci, Ross, & Toglia, 1987a, 1987b; King & Yuille, 1987; Toglia, Ceci, & Ross, 1989; see McAuliff, Kovera, & Viswesvaran, 1998, for a review). In a series of studies, Goodman and her colleagues (Goodman & Aman, 1990; Goodman, Aman, & Hirschman, 1987; Goodman, Bottoms, Schwartz-Kenney, & Rudy, 1991; Goodman, Rudy, Bottoms, & Aman, 1990; Goodman, Wilson, Hazan, & Reed, 1989) showed that three- to four-years-old falsely assented to 'abuse-related' questions such as "Did he keep his clothes on?", "Did he kiss you?", and "He took your clothes off, didn't he?" between 20% and 35% of the time, even when the questions implied actions quite different from those that were witnessed or experienced. Even greater levels of suggestibility might have been obtained if the actions had been more ambiguous and the suggestions more plausible (Steller, 1991), or if the misleading questions had referred to details observed or experienced in other contexts instead of being totally unfamiliar (Roberts & Blades, 1998). Levels of acquiescence to suggestion also vary depending on the circumstances; children are more resistant to suggestion when the same misleading questions are not posed, children are not exposed to misleading stereotypes about target individuals or given incentives to respond falsely, and

conditions that are often associated with recognition errors (such as a combination of specific questions and dolls or instructions to think about non-events, "pretend," or "guess") are avoided. All of these conditions increase the susceptibility to suggestion (e.g., Bruck, Ceci, Francouer, & Barr, 1995; Bruck, Ceci, Francouer, & Renick, 1995; Cassel, Roebbers, & Bjorklund, 1996; Ceci, Huffman, Smith, & Loftus, 1994; Eisen, Goodman, Qin, & Davis, in press; Garven, Wood, Malpass, & Shaw, 1998; Goodman et al., 1989; Leichtman & Ceci, 1995; Poole & White, 1991; Siegel, Waters, & Dinwiddy, 1988; Thompson, Clarke-Stewart, & Lepore, 1997). Preschoolers and young children are also more likely to acquiesce to suggestive questions when exposed to misleading information (Poole & Lindsay, 1996).

The Incorporation of Misinformation into Memory

34. Although most laboratory analog studies examine erroneous responses to misleading or suggestive questions, there is growing and alarming evidence that children not only respond inaccurately but incorporate the misinformation into their memories of the event. Ackil and Zaragoza (in press), for example, reported that children had trouble distinguishing between correct details and details that they had confabulated at the investigators' request; first graders performed more poorly than 3rd and 4th graders who were in turn inferior to college students. Similarly, Ceci and his colleagues (Ceci, Huffman, Bruck, & Loftus, 1994; Ceci, Loftus, Leichtman, & Bruck, 1994) reported that at least some preschoolers came to believe that they had actually experienced fictitious events to which they had assented and Garven, Wood and Malpass (1998) reported that the same was true of 5- to 7-year-olds. When explicitly instructed to distinguish between multiple possible sources of (mis)information, children can frequently distinguish between what they experienced and what they were told (Poole & Lindsay, 1997; Newcombe & Siegal, 1996, 1997) although such instructions do not appear to facilitate accuracy in preschoolers

(Poole & Lindsay, 1997; Gopnik & Graf, 1988; Taylor, Esbenson, & Bennett, 1994).

35. Age trends in susceptibility among school-aged children are less clear, with some researchers reporting that suggestibility continues to decline through the early grades (Ackil & Zaragoza, in press; Cohen & Harnick, 1980; Duncan, Whitney, & Kunen, 1982; King & Yuille, 1987; Marin et al., 1979; Poole & Lindsay, 1996, 1998) and others suggesting conditions that reverse these age trends (Brainerd & Reyna, in press). Suggestions are less likely to affect children's accounts when they pertain to central or salient details (Dent & Stephenson, 1979; Dodd & Bradshaw, 1980; King & Yuille, 1987) and when interviewers counsel children to report personally experienced events only (Poole & Lindsay, 1996). Unfortunately, little research has been conducted on suggestibility regarding memories of incidents that traumatized or affected individuals profoundly, although Goodman, Hirschman, Hepps, and Rudy (1991) found that children who were more distressed by inoculations were less suggestible than children who appeared less stressed by the inoculations.

Suggestibility and Delay

36. Delay should also be significant; the greater the opportunity to forget details about the original event, the more likely it is that memories thereof will be contaminated by misinformation (e.g., Brainerd, Reyna, Howe, & Kingma, 1990; Loftus, Miller, & Burns, 1978; Pezdek & Roe, 1994; Poole & Lindsay, 1995). Several researchers have reported that suggestibility increases as a function of the time between the to-be-remembered (TBR) event and the questioning. Steward and Steward (1996), for example, found that 3- to 6-year-olds were roughly twice as susceptible to suggestive questions about body touch a month after rather than immediately after the TBR event. Acquiescence was even more common after a 6 month delay. No researchers

have studied acquiescence and the incorporation of misleading information after delays as long as those in the Ellis case, but there is every reason to expect both to be even higher in such circumstances.

Suggestibility and Motivation

37. Susceptibility to misleading suggestions should also vary depending on the child's motivation to be completely accurate and/or comply with the interviewer's implicit or explicit agenda (King & Yuille, 1987). Children may feel obliged to answer adults' questions no matter how bizarre (Hughes & Grieve, 1980) and may assume that the repetition of a question implies that the initial answer was unsatisfactory (Ceci & Bruck, 1993). Subtle differences in the interviewers' style may also affect children's suggestibility. Goodman, Bottoms, Schwartz-Kenney, and Rudy (1991) reported that 3- to 7-year-olds were equally resistant to suggestions by "nice" and more neutral interviewers, whereas Davis and Bottoms (1998) and Carter, Bottoms, and LeVine (1996) found that 6- and 7-year-old children interviewed by supportive interviewers made fewer errors in response to misleading questions than did children interviewed by neutral or nonsupportive interviewers. Saywitz, Geiselman, and Bornstein (1996) found that "neutral detectives" elicited less inaccurate and more accurate information from 8- to 10-year-old children whereas "supportive detectives" elicited more accurate and inaccurate details. Goodman et al. (1989) reported that 7- and 10-year-old children were surprisingly likely to accept suggestions made "in an atmosphere of accusation" four years after the event being recalled (Goodman & Clarke-Stewart, 1991) and Ceci et al. (1987a, 1987b) reported that preschoolers were more likely to accept suggestions made by an adult than by a 7-year-old confederate. Overall, then, the effects of interviewer characteristics are less consistent and impressive than one might expect. Most alarming, as far as its relevance to the Ellis case is concerned, however, is Ricci, Beal, and Dekle's (1996) report that

five-year-old children were most likely to acquiesce to suggestions provided by their parents and were, in fact, most inaccurate when interviewed by them rather than by unfamiliar interviewers.

Suggestibility and Negative Stereotypes

38. Young children are also more susceptible to influence when negative stereotypes about the person being discussed are conveyed. Thus, Thompson et al. (1997) reported that the accusative tone of the interviewer affected the children's responses, while Leichtman and Ceci (1997) found that negative stereotyping affected preschoolers' susceptibility to suggestion.

Conclusion: Suggestibility

39. Regardless of the resolution of the various controversies concerning children's suggestibility, most researchers agree that the manner in which children are questioned can have profound implications for what is 'remembered', and this increases the importance of careful interviewing (Brainerd & Ornstein, 1991; Lamb et al., 1998; Poole & Lamb, 1998). Misleading or suggestive questioning can manipulate both young and old witnesses but the very young are especially vulnerable. Suggestive interviewing is most likely to be influential when the memory is not rich or recent, when the content was imagined rather than experienced, when the questions themselves are so complicated that the witness is confused, and when the interviewer appears to have such authority or status that the witness feels compelled to accept his or her implied construction of the events.
40. Ceci and Bruck (1993, 1995; Bruck, in press) have argued that error-contaminating or suggestive interview methods are especially likely to be harmful when they are employed in a context characterized by 'interviewer bias.' Biased interviewers

do not explore alternative hypotheses, ignore information that does not support their assumptions, apply coercive pressure by referring to others' accounts or by responding differently to desired and undesired responses, or encourage guessing. Garven et al. (1998) showed that 4- to 6-year-olds were three times more likely to acquiesce to suggestion when interviewed in this manner for only 10 minutes than were children who were 'only' interviewed suggestively. Bruck, Ceci, and Hembrooke (1998) further reported that most of the preschool children they interviewed acquiesced regarding fictitious events when subjected to such interview techniques.

Suggestibility and the Ellis Case

41. Systematic analyses of the recorded investigative interviews in the Ellis case show that only 6% of the interviewers' utterances were suggestive and that their use of suggestive questions was not remarkable relative to that of investigative interviewers in the USA, UK, and Israel who interviewed children of similar ages during the same era (early 1990s). Unfortunately, the recorded Ellis interviews were conducted many months after informal interviewing of the children began. In the Ellis case, suggestibility is thus a concern because the children appear to have been exposed to extensive suggestive questioning in informal contexts, such as in the course of conversations with their parents. All the available evidence suggests that the circumstances were such as to maximize the potential for contamination.
42. First, the children were all preschoolers, and thus maximally susceptible to suggestion.
43. Second, conversations about the alleged mistreatment began several months after the children last had opportunities to interact with Ellis. These extended delays would have weakened the children's memories and made them more likely to

incorporate adult suggestions into 'memories' of their interactions with Ellis. Steward and Steward (1996) reported that susceptibility doubled after a month. In this case, the children began to be questioned about Ellis several months after they had last interacted with Ellis.

44. Third, the intensity and suggestiveness of these conversations with anxious and concerned parents, eagerly seeking to determine whether and how their children had been abused, would have inflated the likelihood that they would suggest material and details that became incorporated into the children's memories. Most, if not all, of the insidious techniques described by Garven et al. (1998) are likely to have characterized the parent-child conversations. If children in that study accepted 58% of the suggestions about an event that occurred a week earlier after only 5 to 10 minute of inappropriate questioning, imagine how much more likely would be the children in this case to assent falsely when repeatedly and suggestively interviewed by their parents over a period of months about alleged incidents that happened months (and perhaps years) earlier, particularly when reports by other children kept emerging to alter the suggestive focus of the conversations.
45. Fourth, it is noteworthy that the children initially reported no abuse by Ellis when questioned by either their parents or in some cases even by the forensic interviewers. Only after extensive interviewing by the parents, much of it suggestive, did the children each begin to make accusations against Ellis. Delayed 'disclosure' does not imply deceptive disclosure, of course, but abused children are most likely to keep secrets when still in contact with (and presumably fearful of) the alleged abuser and when their parents are skeptical or unsupportive (Lawson & Chaffin, 1992) neither of which was true in this case.
46. It is particularly alarming that many of the allegations regarding specific incidents were made roughly simultaneously by several

alleged victims whose parents were in close communication; it seems highly plausible that the parents suggestively interviewed their children about details 'mentioned' by other children. Unfortunately, once contamination has occurred, it is often impossible for children—especially very young children like these—to distinguish between memories of experienced events and details suggested to them and reinforced over time by repeated suggestive interviewing (Ackil & Zaragoza, in press; Ceci & Bruck, 1993, 1995; Ceci et al., 1994a, 1994b). Regrettably, none of the early Police interviews and none of the informal interviews and conversations with concerned parents were recorded, so we have no record of the children's accounts before possible contamination occurred, although we have the uncontested assertions that all of the children initially denied being victimized by Ellis. All of the critical conversations and formal interviews in which allegations first surfaced were not recorded and several of the interviews were forums for the children to repeat information that had been discussed earlier.

RESEARCH ON INVESTIGATIVE INTERVIEWS

47. Because of the nature of the forensic investigation and the way children have been socialized to communicate with adults, children rarely 'volunteer' detailed and complete accounts of abusive events. Interviewers face the daunting task of eliciting additional information about sexual events, the temporal and spatial context in which they occurred, and the people involved. For reasons explained earlier, it is desirable to obtain as much of this information as possible using questions and prompts which tap free-recall processes, thus avoiding the risks and errors which often accompany non-spontaneous accounts elicited from children,
48. An understanding of children's linguistic and memorial capacities and limitations should influence the ways in which children are interviewed and the ways in which their accounts

are interpreted. Like adults, children can be informative witnesses, and a variety of professional groups and experts have recognized this, offering recommendations regarding the most effective ways of conducting forensic or investigative interviews (e.g., American Professional Society on the Abuse of Children (APSAC), 1990, 1997; Bull, 1992, 1995, 1996; Fisher & Geiselman, 1992; Jones, 1992; Lamb et al., 1994, 1995, 1998; Memorandum of Good Practice, 1992; Poole & Lamb, 1998; Raskin & Esplin, 1991a; Raskin & Yuille, 1989; Sattler, 1998). As Poole and Lamb (1998) pointed out, these books and articles reveal a substantial degree of consensus regarding the ways in which investigative interviews should be conducted, and a remarkable convergence with the conclusions suggested by a close review of the experimental and empirical literature. Clearly, it is often possible to obtain valuable information from children, but doing so requires careful investigative procedures as well as a realistic awareness of their capacities and tendencies.

Unfortunately, agreement about the goals and desired characteristics of investigative interviews have not ensured that forensic interviews are typically performed well, as my colleagues and I found when we began undertaking research designed to explore the utility of various investigative utterances in forensic interviews. As noted above, open-ended questions yield the most accurate accounts in the laboratory, although these accounts are often incomplete (Dent, 1982; Dent & Stephenson, 1979, Goodman & Aman, 1990; Goodman et al., 1991; Ornstein et al., 1992; Peterson & Bell, 1996). The superiority of open-ended questions is attributable to the fact that they are recall probes, whereas many focused or directive questions are recognition probes. When recall memory is probed using open-ended prompts, respondents attempt to provide as much relevant information as they 'remember,' whereas when recognition is probed using focused questions, children may have to confirm or reject information provided by the interviewer. Recognition probes focus the child on domains of

interest to the investigator and exert greater pressure to respond, whether or not the child is sure of the response. Recognition probes are more likely to elicit erroneous responses in eyewitness contexts because of response biases (i.e., tendencies to say "yes" or "no" without reflection) and false recognition of details that were only mentioned in previous interviews or are inferred from the gist of the experienced events (Brainerd & Reyna, 1996). For these reasons, open-ended questions are assumed to yield the most information and the fewest errors in forensic contexts as well.

50. Our research has all been conducted using reliable transcriptions of forensic interviews conducted in Israel, the United States, the United Kingdom, and Sweden by social workers, sheriffs or police officers. For research purposes, we focus on the portion of each interview concerned with substantive issues, thereby excluding any introductory comments at the beginning of the interview, attempts to establish rapport with the child, and any attempts at the end of the interview to discuss neutral topics. Coders review the transcripts and categorize each interviewer utterance, defined by a 'turn' in the discourse.

Types of Utterances

51. For the purposes of this document, I focus on the five types of utterances that consistently comprise around 90% of the interviewer utterances recorded. Note that we label these categories in a distinctive way, such that the utterances we call leading in our research reports may not be the same as those called leading by other researchers or legal practitioners.
 1. Invitations (using questions, statements or imperatives) for an open-ended response from the child. Such utterances do not delimit the child's focus except in the most general way (for example: "And then what happened?")

2. Facilitators. Utterances like "O.K.", restatements of the child's previous utterance, and nonsuggestive words of encouragement that are designed to prompt continuation of the child's narrative.
 3. Directive utterances, which focus the child's attention on details or aspects of the event that the child had previously mentioned. These can be open-ended prompts of recall memory ("Tell me about that knife.") or probes of recognition memory ("Did you see that knife?")
 4. Leading utterances, which focus the child's attention on details or aspects of the account that the child had not previously mentioned.
 5. Suggestive utterances, stated in such a way that the interviewer strongly communicates what response is expected, or assumes details that have not been revealed by the child. Most of these utterances would be called leading in other forensic contexts.
52. All invitations are open-ended prompts of recall memory, whereas focused questions can be either recognition or recall memory prompts. In practice, facilitators occur in the course of narrative responses drawn from recall memory, encouraging children to continue their narratives. The three types of focused utterances (directive, leading, suggestive) lie along a continuum of risk, varying with respect to the degree of suggestive influence they exert on children's responses.
53. In our research, raters also count the number of words in each utterance and tabulate the number of new details conveyed by the child. By definition, details involve the identification and

description of individuals, objects, events, or actions relevant to the alleged incident.

54. Invitational prompts consistently yield responses that are roughly three times longer and richer in relevant details than responses to focused interviewer utterances (e.g., Lamb, Hershkowitz, Steinberg, Boat, & Everson, 1996; Lamb, Hershkowitz, Sternberg, Esplin, Hovav, Manor, & Yudilevitch, 1996; Sternberg, Lamb, Hershkowitz, Esplin, Redlich, & Sunshine, 1996). The superiority of open-ended utterances is apparent regardless of the age of the children being interviewed. Because focused questions frequently test recognition rather than recall memory, furthermore, the information they elicit is more likely to be inaccurate, but unfortunately focused utterances are much more common in the field than open-ended questions are. In the field sites we studied initially, for example, more than 80% of the interviewer utterances were focused whereas only 6% were invitations. Research undertaken in the United States, the United Kingdom, and Israel by several researchers shows that the over-reliance on focused questions is evident regardless of the children's age, the nature of the offenses, the professional background of the interviewers, or the utilization of props and tools like anatomical dolls (Craig, Sheibe, Kircher, Raskin, & Dodd, in press; Lamb, Hershkowitz, Sternberg, Boat, & Everson, 1996; Lamb, Hershkowitz, Sternberg, Esplin, Hovav, Manor, & Yudilevitch, 1996; Sternberg, Lamb, Hershkowitz, Esplin, Redlich, & Sunshine, 1996; Stockdale, 1996; Walker & Hunt, 1998; Westcott, Davies, & Horan, 1998). Focused questions thus abound, even though narrative responses are more desirable because they are obtained from free recall, they are more detailed, and they are more accurate.
55. Because errors of commission are more likely to misdirect further questioning and lead to mistaken conclusions, they can have serious implications. In forensic contexts, the accuracy of individual details can be determined infrequently, but there is

no reason to believe that probes of recall and recognition memory would function differently in field and laboratory contexts. It is for this reason that investigators have been urged to probe recall memories using open-ended prompts as extensively as possible, and to avoid strings of focused questions in which the risks of compounded errors are especially serious. Because inaccurate information can be provided in response to open-ended prompts, of course, especially when delays are long or there have been opportunities for post-event contamination (e.g., Leichtman & Ceci, 1995; Poole & Lindsay, 1995, 1995; Warren & Lane, 1995), it is crucially important for investigators to inquire about all relevant interviews and experiences since the alleged event, documenting the evidentiary 'chain of custody' as they would when the evidence was a gun or knife (Rosenthal, 1995).

Training Forensic Interviewers

56. More recent research demonstrates that forensic interviewers can be trained to conduct 'better interviews'—interviews in which fewer suggestive questions are asked and in which greater proportions of the information are elicited using open-ended prompts, ideally before asking any focused or leading questions. In the first such study, which was conducted in Israel, Sternberg, Lamb, Hershkowitz, Yudilevitch, Orbach, Esplin, and Hovav (1997) showed that children who had been 'trained' by forensic interviewers to provide narrative responses provided two and one-half times as many details and words in response to the first substantive utterance than did children who were (like children in most forensic interviews) 'trained' to respond to focused questions. Children in the narrative condition continued to provide more information in response to subsequent invitations, suggesting that children who had the opportunity to practice providing lengthy narrative responses to open-ended questions in the introductory phase of the interview continued this pattern after the interviewers shifted focus to the alleged

incidents of abuse. Similar findings were obtained when a replication study was conducted in the United States (Steinberg, Lamb, Esplin, & Baradaran, in press). Such findings are also consistent with the results of laboratory/analog studies suggesting that motivational and contextual factors play an important role in shaping children's reports of experienced events (Paris, 1988; Saywitz, Goodman, Nicholas, & Moan, 1991). Along with the results of our ongoing research, they also suggest that, even in authentic forensic interviews, it is possible to entrain response styles that enhance the richness of information provided by children by providing them with an opportunity to practice providing detailed narrative accounts of experienced events and by reinforcing this style in the pre-substantive portion of the interviews.

57. Interestingly, although the open-ended training influenced the response style of the children who participated in our studies, it had little effect on the interviewers' style of questioning after the first substantive question was posed. In other words, even when children provided lengthy responses to the first open-ended substantive question, interviewers did not continue to ask open-ended questions but rather shifted to more focused questions. This unexpected finding suggested that it might be valuable to script additional open-ended questions throughout the substantive phase of the interview. We thus developed increasingly detailed scripts for the entire interview (including substantive and non-substantive sections).

These extended scripts indeed improve the overall informativeness of forensic interviews (Steinberg, Lamb, Esplin, Hershkowitz, & Orbach, in press; Hershkowitz, Orbach, Lamb, Sternberg, Esplin, & Horowitz, in preparation). Interviewers retrieve more information using open-ended questions, conduct better organized interviews, and are more likely to follow focused questions with open-ended probes (pairing), as we suggested. Interviewers clearly have difficulty internalizing

recommended interview techniques and may need more explicit guidelines than those typically provided in training sessions or manuals, however intensive. As shown below, forensic interviewers who follow scripted protocols seem to elicit more information from recall memory and avoid potentially dangerous or risky interviewing practices more successfully than other experienced interviewers and, as a result, the scripts we developed have been made mandatory throughout Israel and are being field tested with success in several parts of the United States. A demonstration project in the United Kingdom is scheduled to begin early in 1999.

Application to the Ellis Case

59. For present purposes, the results of these studies also provide a benchmark data base comprising forensic interviews of children as young as those interviewed in the Ellis investigation, showing what is possible when children are interviewed expertly—that is, in accordance with the 'best practice' guidelines adopted by all of the international professional and expert groups cited earlier. The statistics derived from a careful analysis of the transcribed Ellis interviews can thus be compared with statistics based on forensic interviews of similarly-aged children in Israel, the United Kingdom, and the United States interviewed using the scripts which were developed and implemented after the Ellis interviews took place. Stated differently, it is thus possible to determine whether the Ellis interviews were 'better' or 'worse' than comparable interviews conducted in the same era (early 1990s) as well as to compare them with state of the art interviews documenting what is possible when recommended practices are actually followed. In evaluating these results it is, of course, important to remember that the recommendations themselves had all been offered and widely endorsed by the time of the Ellis interviews, and that the interviewers claimed in their testimony to be following them.

60. Tables 1 and 2 (annexed hereto and marked with the letters 'M' and 'N' respectively) summarize some valuable comparative information. Statistics derived from analyses of interviews with the alleged Ellis victims are presented in column 5. It appears from Table 1 that the Ellis interviewers conducted interviews quite similar to the average interviews conducted by their contemporaries in the United Kingdom and United States (see columns 2 through 4). In comparison with their peers in the USA and UK, however, the Ellis interviewers asked remarkably few invitations. In addition, the Ellis interviewers relied much less on invitations and more on focused prompts than interviewers following recommendations about appropriate or 'best practice' techniques (columns 6 and 7).
61. The effects of these differing interview styles are evident in Table 2, which shows that a remarkably small proportion of the information elicited by the Ellis interviewers was obtained using the widely recommended and less-risky open-ended questions and prompts. Specifically, the Ellis interviewers obtained less than half as much information using invitations than did their contemporaries in the UK and USA in the early 1990s and about 14% of the amount of information obtained in this way by highly trained interviewers in the mid to late 1990s. Instead of relying on invitations that probe children's recall memory, in other words, the Ellis interviewers relied upon focused questions to elicit information. As noted earlier in this document, invitations are much more likely to elicit accurate information than are focused questions. Extrapolating from the available evidence, the likelihood of error in the information obtained by the Ellis interviewers was greater than necessary or possible and this is a source of concern.
62. One further statistic underscores the riskiness of the interviewing strategies adopted in these interviewers. In the course of the interviews we analyzed, all of the children contradicted some relevant details that they had provided

earlier. In all, 232 details were specifically contradicted by the children. Importantly, every contradiction emerged in response to a focused question; no response to an open-ended question ever contradicted a detail provided by the child. This simple statistic further underscores the desirability of relying on open-ended prompts and eschewing focused prompts as much as possible for fear of eliciting erroneous information.

We have no way of knowing what proportion of the total number of details elicited by the Ellis interviewers were erroneous. All we can say with some certainty is that an unusually high proportion of the details these children provided are of questionable validity.

CONCLUSION

64. In all, there are several sources of concern about the children's testimony that was so central to the conviction of Peter Ellis. First, as discussed in the previous section, the interviewers relied much more heavily than necessary or desirable on potentially error-inducing focused questions and asked remarkably few of the open-ended invitations that are universally recommended. Our analysis of the Ellis interviews demonstrated that these interviewers asked fewer than half as many invitations than contemporaries in other countries interviewing children of the same ages. This only made their deviation from 'best practice' interviews even more dramatic.
65. Second, the probability of error is magnified by the extended delays between alleged incidents and these investigative interviews. Children and adults obviously forget information, children forget more rapidly than adults do. Recognition memory probes are, of course, especially likely to elicit erroneous information when the memories are hazy or faded.

66. Third, the problems in this instance were compounded by what else took place during the time between the alleged offenses and the forensic interviewing. The public record highlights the extraordinary levels of parental anxiety and concern which prompted unrecorded, unskilled, and presumably suggestive interviewing by the parents. The available evidence suggests that repeated suggestive interviewing much less intense than that experienced by these children can foster the development of false memories, especially when the original events are hazily remembered and the questioning insistent. It is noteworthy and alarming that the parents of different children were in frequent contact about the disclosures that they had elicited or heard about and that parallel or similar disclosures were often elicited from different children at about the same time. Such a pattern is indicative of contamination, not validation.
67. In light of the extended period of parental interviewing, it is inconceivable that some contamination would not have taken place before the forensic interviews took place. For this reason, one must view all contents of the children's recorded reports with considerable skepticism.
68. The only effective safeguard against such contamination is preventive; all alleged victims should have been interviewed professionally as soon as any suspicion arose. These interviews would have provided insight into the children's uncontaminated memories. Although the interviews were apparently not recorded, I believe that many of the alleged victims were interviewed by someone earlier (such interviews could include professional interviewers, parents, Police and counsellors), and that none made allegations at that time. True victims sometimes deny being abused, of course, but such hesitation is much more common when the children continue to have contact with an abuser of whom they are protective or afraid. None of the circumstances in this case make it reasonable

to expect widespread refusal to disclose abuse by a non-family member with whom the alleged victims had no further contact.

69. In sum, the reports of these children should be viewed with considerable suspicion. A close examination of the children's experiences and especially their exposure to formal and informal interviews and conversations about their alleged abuse raises considerable doubt about the reliability of the recorded testimony that was central to the prosecution of Peter Ellis. The extraordinary potential for contamination in combination with the reliance on interview procedures that inflate the probability of error in the best of circumstances raise the probability of tainted or unreliable testimony to an unacceptable level.
70. It is certainly true that child interviewing techniques have become better understood since 1991/1992. Much of what is now known about the interviewing of children illuminates the deficiencies of the Ellis evidentiary interviews. The interviewers in the Ellis case did not perform well relative to current recommendations and best practice guidelines. There is, in short, an unusually high probability that the interviewers unwittingly elicited erroneous information from the children.

THE EFFECTS OF CONTAMINATION ON CHILDREN'S ALLEGATIONS REGARDING PETER ELLIS

71. After reviewing the material referred to earlier in my affidavit I had become increasingly concerned by the likelihood of contamination of the children's accounts. In this section, I explain why substantial doubts must exist about the primary evidence (the children's testimony) against Ellis. To maximize the readability of this section and avoid redundancy, I have made minimal reference to the primary research literature, which was reviewed earlier in my affidavit and may be cross referenced. I would be happy to elaborate further if requested to do so, however.

72. As I have outlined, research in the last decade has advanced our understanding of the possible contaminating influences on children's memory such that we now know far more about the possible sources and effects of contamination.

Contamination: How it Occurs

73. In order to explain how contamination occurs, I find it helpful to summarize some fundamental characteristics of human memory. In everyday conversation, the implicit metaphor for human memory processes is the photographic process. Photographic images are bright, clear, and detailed, but if the images are not fixed chemically, their sharpness and richness fade and blur over time.
74. Students of memory warn that the above analogy misrepresents memory processes in important respects, however. Memory, they agree, is a constructive and reconstructive process. Although short-term representation may involve photograph-like eidetic images, information transfer to long-term memory is selective. In addition to attentional and perceptual processes that affect the salience of information and thus the likelihood that it will be encoded for storage or retention, the completeness of encoding or storage depends on the depth of analysis and interpretation, and on the recognition of associations with related experiences, events, or concepts. The greater the number of associations an event triggers, the better a memory of it is likely to be stored.
75. Subsequent retrieval of the memory trace seldom involves immediate recall of all the details that have been encoded and stored, however. Instead, retrieval of memory traces is affected by the adequacy and appropriateness of the retrieval attempts. As a result, retrieval is more complete when multiple cues or

associations assist the person in recalling the to-be-remembered (TBR) event.

76. Because it involves working with the stored memories, retrieval tends to consolidate the memory, but also provides an opportunity for contamination, particularly when conditions at the time of retrieval introduce new details or permit new associations that were not made at the time of initial encoding. And memories clearly fade over time, especially when not retrieved and revisited in the interim, in part because the initial associations that facilitated memory are weakened by disuse and displacement (i.e., more recent experiences form associations that come to mind more readily than older ones).
77. As noted above children tend not to encode experiences and events as completely as adults do, both because their understanding of the world is more limited (and they are thus less adept at interpreting their experiences) and because their prior life experiences, being fewer and less varied, have afforded fewer past experiences with which new events or experiences can be associated. Less complete encoding and the availability of fewer associations to facilitate or prompt retrieval together ensure that young children appear to forget more rapidly and to remember less about early experiences than older children and adults do.
78. Not surprisingly, therefore, both the amount of information remembered and the speed of forgetting are a function of age, with children remembering more and forgetting less rapidly as they grow older. The passage of time is thus associated with weakening of the memory trace, meaning that less information is recalled about TBR events as time passes.
79. When memory traces are weaker, however, they are also more likely to incorporate suggested contaminating information into memory of the TBR event. This means that the longer the delay

and the greater the opportunity for contamination, the less accurate the memories are likely to be. All of the associated risks are also greater for young children than for adults.

Contamination: Application to the Ellis Case

80. All of these factors need to be taken into account when attempting to evaluate the allegations against Peter Ellis. First, all of the complainants were extremely young at the time of the alleged incidents. Specifically, the children ranged in age between 58 and 60 months (i.e., they were around 5 years of age) at the time of their last encounters with Ellis. As a result, one would have to assume that their encoding was much less complete or strong than it would have been had the informants been older.
81. Second, a substantial amount of time elapsed between the latest possible time that the alleged events could have occurred and the time that these events were explored in the investigative interviews that I studied. Specifically, the amounts of time involved ranged from 5 to 49 months, with an average delay of more than 18 months. To place this delay in perspective, note that Steward and Steward (1996) found that suggestibility doubled after a delay of only one month, and was substantially greater after a delay of six months. No researchers have systematically studied the effects of delays as long as those involved in the Ellis case, but all theories of memory would predict that susceptibility to the incorporation of misleading information would continue to increase as time passed and the memory traces grew weaker and weaker.
82. Third, the complainants were indeed exposed to the types of interviews (by parents, police investigators and by specialist interviewers) and conversations that are known to contaminate children's accounts of either experienced or imagined events.

83. Contrary to popular presumption, inaccurate accounts, such as false allegations of abuse, do not develop only when malicious adults deliberately coach children to make false reports. Indeed, analysis of thousands of forensic interviews in the United States, Israel, the United Kingdom, and Sweden suggests that such situations are rare. Instead, inaccurate accounts are more likely to arise when children are repeatedly questioned by anxious, biased interlocutors. In the Ellis case, as in other celebrated cases involving multiple possible victims, parents are understandably anxious and eager to determine whether or not their children were victimized. This anxiety or concern prompts repeated questioning of children about actions the parents suspect (perhaps because they have been alleged by other parents or children) or fear (perhaps because the parents view these as particularly harmful or likely). Unfortunately, by merely posing multiple questions about a specific person, interviewers (including parents) unwittingly suggest certain actions or details, and such details tend to be incorporated into "memory" when memories of actual interactions with that specific person are weak, as they would be after delays as long as those involved in the Ellis case.
84. Further, the mere repetition of questions ("Did he ever ____?" "Are you sure he ever ____") magnifies the likelihood of contamination which -- as explained below -- is further exaggerated when the questioner a) refers to reports by other alleged victims or witnesses ("Sally said _ _ _", "Bob said _ _ _"), b) only asks about negatively-toned events, and c) appears to know a great deal about events the child may not remember. When children initially dislike a person (for example, it appears that **Molly Sumach** disliked Peter Ellis because he teased her) and/or negative stereotypes are conveyed in conversations with the children, negatively-valanced contamination is more likely, particularly after extended delays which have weakened real memory traces.

85. None of the initial investigative or evidentiary interviews of the Creche children yielded allegations of abuse. Although I have not had access to the initial interviews there is no reason to assume that these interviews involved fewer focused probes than those used in the later interviews that were recorded, however, and the statistics included in my earlier report showed that focused prompts were unusually common in these interviews. As a result, the seeds of contamination may have been sown in some minds in these early evidentiary interviews. More importantly and specifically, the record shows that, following her child's rather ambiguous declaration about "Peter's black penis" (which was initially disavowed as a "story" by the child), Ms. Magnolia began questioning her child intensively in a very focused, and highly suggestive fashion. Likewise, the parents of conviction complainants acknowledged both questioning their children and exchanging information with other parents. Such exchanges inflate the probability that the children were repeatedly questioned over time, in ways that at minimum suggested new actions and likely involved references to other children's reports. Both of these factors are known to increase acquiescence and suggestibility.

Contamination: Identifying and Minimizing the Risks

86. Ideally, all potential victims would have been invited to videotaped evidentiary interviews by well-trained professional interviewers as soon as possible after the first allegations arose. Instead, unfortunately, few children were interviewed early in the investigation and those who were did not allege abuse. Three months elapsed between the time that allegations surfaced and recorded interviews of the conviction complainants commenced, and this interlude was marked by what must be characterized as ample and unchecked opportunities for contamination of the children's memories. Communication among and questioning by the parents did not end when the relevant recorded evidentiary interviews began in February 1992,

furthermore. Indeed, subsequent interviews of some of the complainants were triggered by new "disclosures" elicited by the parent interviewers and conveyed to the forensic investigators. Not surprisingly, therefore, the children continued to report new details about alleged incidents of abuse throughout the extended interview process.

87. Because with one exception the parent-child conversations were not recorded, we do not know for certain how likely they were to contaminate the children's accounts. The available evidence raises substantial concern, however. Although they down-played the number of conversations and attempted to make the questioning appear nonintrusive, for instance, those parents who testified about this acknowledged multiple conversations involving potentially contaminating content.
88. In addition, the systematic research conducted by my colleagues and I (in an as-yet-unpublished report concerning forensic investigators' descriptions of interviews that were also recorded) and by Bruck, Ceci, and Francoeur (1999) shows that both professionals and parents cannot describe interviews and conversations accurately, even when they are motivated to do so.
89. In particular, both parents and professionals misrepresent their reliance on focused and suggestive prompts and are more likely to attribute details to the children's spontaneous utterances when they were in fact stated by the adults or elicited in a leading fashion from the children. There is no reason to believe that the parents of Ellis' complainants would be less likely than the parents and professionals in these studies to interview nonsuggestively or to represent their conversations more accurately. Indeed, understandable concerns about their children's welfare would undoubtedly make them press harder in their questioning, while awareness of the forensic

implications would surely make them more (not less) likely to distort the true architecture of these conversations.

90. As mentioned earlier, two other factors elevate concerns about the probability of contamination in the Ellis case: The failure of the interviewers to pursue alternative hypotheses and the extent to which interviewers appeared very knowledgeable about the alleged events.
91. All professional guidelines and expert professional recommendations (including the authoritative British Memorandum of Understanding, 1992 and the Guidebook by Poole and Lamb, 1998, published by the American Psychological Association) emphasize that interviewers need to seek evidence in support of multiple competing hypotheses. Contrary to this advice, it is clear that the forensic interviewers, the police investigators, and the parents were singularly focused on evidence consistent with the hypothesis that Ellis had abused the children in his care.
92. In none of the recorded interviews, and indeed in none of the material made available to me, is there evidence of any systematic effort to explore the most obvious alternative hypothesis---that these frequently bizarre and implausible allegations were the product of extensive contaminating questioning by understandably anxious parents.
93. For example, it appears that little or no attempt was made to explore the possibility that exposure to the media (including televised accounts of the Civic Creche scandal), prior conversations with the parents, children, and investigators (including Colin Eade), and unrelated experiences might have affected the children's allegations concerning Ellis.
94. To make matters worse, the parents of the complainants were in frequent direct and indirect communication with one another.

As a result, the allegations elicited by the parents of one child frequently became the focus of suggestive questioning by the parents of a second or another child, as exemplified by Ms Lacebark's report that she questioned her daughter Kari after learning of allegations made by Audrey Walnut. As in this example, such questions often made reference to other children's reports, making the children believe that the parents were very knowledgeable while imposing implicit social pressure to conform. Both of these factors are known to have powerful coercive effects on children, greatly increasing their susceptibility to suggestion.

95. Furthermore, Colin Eade's frequent contacts with the children and their parents immediately before and after interviews and in between interviews afforded ample and unchecked opportunities for conveying information between families and for shaping the children's allegations, particularly because, as lead investigator and 'monitor' of many of the interviews, he had unique insight into the developing case and the emergent allegations.
96. I was surprised to see no obvious acknowledgement by the investigators of the very positive report that had been prepared on the Creche and its dynamics in 1991 by the Education Review Office. Annexed hereto and marked with the letter 'O' is a copy of the Report entitled "*Civic Child Care Centre*" and dated 25-29 November 1991. The absence of reference thereto is further suggestive of the investigators' failure to consider alternative hypotheses.
97. To put these risks into perspective, it is valuable to consider the results of a recent study by Garven, Wood, and Malpass (1998) who systematically assessed some of the risky interview practices employed by interviewers in the infamous McMartin case. These biased interview techniques include the failure to explore alternative hypotheses, a tendency to ignore information that

does not support the interviewers' assumptions, coercive references to others' accounts, differential responses to desired and undesired accounts (including rewards for good performance) and encouragement to guess when uncertain. All of these techniques were employed by the parents and/or professional interviewers in the Ellis case, making the study particularly relevant. Garven and her colleagues found that 4- to 6-year-olds accepted (i.e. incorporated) a remarkable 58% of the misleading and incorrect suggestions offered in a 5 to 10 minute interview that took place a week after the TBR event. Without doubt, more extensive questioning by parents rather than unfamiliar interviewers about events that occurred years rather than days earlier would surely foster even greater contamination, rendering it impossible to determine which if any of the complainants' accounts were veridical reports of experienced events.

98. Research had made clear that even skilled and experienced evaluators of children's testimony have difficulty distinguishing between reports of events that were actually experienced and reports of events or details that have been suggested to the child. In the Ellis case, the likelihood of contamination is so high and the failure to explore alternative hypotheses so obvious that it is almost impossible for either an expert or a tribunal of fact to determine which if any of the complainants' accounts were valid.
99. Finally, I address the question of whether steps can be taken to ameliorate the situation when there is concern that children's reports have been contaminated. As explained above, contamination can be minimized by interviewing children as soon as possible after the alleged incidents, thereby affording minimal opportunities for contamination of the initial accounts. Once contamination has occurred, it is typically impossible to reverse its effects, and children will be unable - except in rare circumstances unlike those at issue in the Ellis case - to

distinguish between details that were 'real' and those which were 'suggested'.

100. This inability to distinguish among the sources of information reflects basic memory processes, not maliciousness or a conscious attempt to deceive. By the time they testified or were interviewed, therefore, these children were presumably unable to distinguish between experienced and suggested events.
101. Allowing the children to dress up as fictional characters to testify (as **Derek Ngaio** and **Lara Palm** did), of course, would not have communicated the seriousness of the testimonial process or facilitated the children's discrimination between reality and fantasy, even if that had been possible by then.
102. In the United States, the possible contamination of children's have been considered by many authorities. In overturning the convictions of a day care worker, Kelly Michaels, whose many young accusers had been exposed to extensive coercive and suggestive interviews, for example, the Supreme Court of New Jersey ruled that it would be necessary for the Trial Judge to conduct a Taint Hearing, focused on the likelihood that each witness could provide clear testimony regarding actual (as opposed to suggested) experiences. The Court ruled that only testimony that was demonstrably untainted should be admitted into evidence, establishing a pre-trial practice that has since been adopted in many States, including New Jersey. When testimony appears likely to be tainted, the State is required to proceed to Trial using evidence other than the tainted testimony.

CONCLUSION

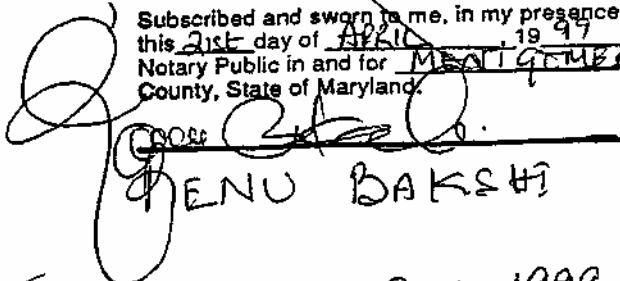
103. The research indicates that there are many ways in which children's reports can be contaminated. Specifically, suggested information is most likely to be incorporated into children's 'memories' when inter alia 1) details are suggested repeatedly, 2)

alternative hypotheses are not pursued, 3) the questioner appears to be knowledgeable about the events, 4) an air of accusation is established, 5) the questioner responds positively to certain contents and ignores others, 6) some details are rehearsed (e.g. incorporated into a book about the allegations that is then reviewed and revised), 7) the child is led to believe that others have already reported the details in question, 8) multiple conversations with multiple sources of contaminating information - including parents, peers, counsellors, and investigators - proceed unchecked, and 9) any real memories are weak. Any of these conditions in isolation foster contamination, and the risks are magnified when, as in the case of Peter Ellis, all the relevant conditions are met. Cases involving multiple young complainants within the same child care setting involve higher risks of contamination and thus require precautionary and preventive steps by investigators to minimize these risks. Such steps were not taken in the case of Peter Ellis; on the contrary, the record reveals many circumstances that maximized the potential for contamination. As a result, the probability that the children's reports were tainted is extremely high.

AFFIRMED by the said)
MICHAEL ERNEST LAMB)
 at Gaithersburg, Maryland)
 this 21st day of April)
 1999 before me:)



Subscribed and sworn to me, in my presence,
 this 21st day of APRIL 19 99
 Notary Public in and for MONTGOMERY
 County, State of Maryland.



My comm expires 09-01-1999.