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### RUNNING HEAD: Memory Lessons from the Courtroom

## Memory Lessons from the Courtroom: Reflections on being a Memory Expert on the

Witness Stand

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#### Abstract

In the first part of this article, I describe a variety of cases that I have been involved with that led to my becoming an expert witness. These cases range from questions about children's memory for being raped, to remembering an ear-witnessed murder, to preventing future false memories. In the second part of this article, I reflect on some of the remarkable feats of remembering that complainants exhibit in court, ones that contradict much of what the scientific study of memory has shown to be true. Along the way, I argue that until this scientific knowledge becomes part of a "culture of memory" familiar to triers of fact (judges, jurors), police, and laypeople, memory experts will continue to be an inexorable part of the legal process when memory serves as the main or only evidence.

Memory Lessons from the Courtroom: Reflections on being a Memory Expert on the

### Witness Stand

### I. Experiences of an Accidental Memory Expert Witness

By way of background, let me start by noting that I have been providing written, oral, and practical advice on legal matters where memory has served as the main or only evidence for over 20 years now in cases in Canada, the United States, and the United Kingdom. My introduction to this world of "applied memory" came when I was a professor at Memorial University in St. John's Newfoundland in Canada. In the early 1990s, I was called by the prosecution to testify in a case involving a girl who had brought a series of rape charges against her primary school teacher. Quite remarkable, I was asked whether a person who was 12 to 13 years old could remember such an event with any degree of accuracy. More specifically, the prosecution (and the court) wondered what sorts of details someone who was being raped (and hence under stress) should remember and which ones would they forget? While on the stand and being examined in chief, a rather lengthy discussion took place concerning key factors in memory for such traumatic events. These included the role of peripheral and central details in long-term remembering, the impact of stress on memory, and the importance of dissociative processes, ones that could ostensibly play a key part in the "repression" of such experiences. Of course, all of these variables were commonly discussed in cases such as these during the 1990s and they were all critical variables embedded in the memory research literature of the time.

All of this was going as anticipated. But following my examination in chief, the lawyer for the defence began a cross examination that was entirely unexpected. That is, rather than wanting to know about memory, he decided to attack what he believed to be the basis of my opinion. In particular, he asked a number of very pointed (and well rehearsed) questions about the kinds of mathematical (i.e., Markov) models I used in my research. Being a graduate in mathematics himself prior to becoming a lawyer, this questioner believed that he could attack my credibility as a memory expert by trying to dazzle the jurors with his knowledge of mathematics and attempting to show that I was not as smart as he was when it came to Markov modeling. Such a strategy foundered, not only inasmuch as he did not really seem to know much about his chosen topic, Markov models, but after approximately 45 minutes of such questioning, the judge turned to the him and remarked, "what does this have to do with the matter before the bench?" This not only served to wake up the jury, but also ended the defence's rather bizarre, and as it turned out extremely ineffective, cross-examination. Needless to say, this introduction to the role of memory expert in the courtroom left me rather perplexed. Indeed, I left wondering whether such an adventure should be entertained again in the future.

Of course, I did return to the witness stand and have served as a memory expert in hundreds cases requiring a wide range of circumstances. Over the past couple of decades in my role as a memory expert, I have not only testified in numerous trials, but also have assisted authorities (i.e., the police) before they interviewed traumatized children to insure as unbiased an interview as possible. In fact, I have devoted considerable time and effort in training frontline workers (e.g., police, social workers) how to conduct interviews that elicit as much factual information as possible while at the same time trying to minimize the amount of incorrect or false information. Fortunately, many of these procedures are now well known and have been formalized in the writings of a number of prominent researchers, including the important work by Michael Lamb and his collaborators (e.g., see Lamb et al., 2009). In my experience, a particularly poignant case concerned two young children (4 and 6 years old at the time), one who had ear-witnessed and the other who may have also eyewitnessed their mother's murder. This was a particularly difficult case – even getting to the stage where rapport was established took a considerable amount of time. Indeed, the judicial need for "untainted" evidence provided stark contrast to the children's mental health needs

during this traumatic time. Eventually, though, both children not only received the care and help they needed, but were able to provide sufficiently detailed accounts of this horrific event that an arrest was made and a conviction obtained.

In a number of other cases, my role has been to provide evidence about what children at different ages can and cannot remember about events they witnessed over significant delays or very lengthy retention intervals. These intervals can extend to one or more years depending on delays experienced in getting the case to trial. Such questions are important not only because of the effects that time itself can have on memory generally, but more specifically the effects that the nature and number of intervening events occurring during the delay can have on memory (also see Alexander et al., 2005).

Of course, these opinions focused not only on memory accuracy, but also on the potential influence of suggestibility from authority figures (e.g., questioning by the police, social workers, prosecutors), something that could fill an entire book. Indeed, there were a number of very similar cases during the late 1990s in which children (always girls) were coached (at school or by social service case workers) through some very specific workbooks to "get out their anger toward their father." Frequently, these workbooks started off in a very innocuous manner (drawings of father and daughter playing together) but ended with drawings of the child trying to hurt or kill their father (e.g., by stabbing their father with knives). These drawings included very detailed and gory depictions of the child and her father, ones that often included blood being spilled, disembodied limbs, and even decapitation. Curiously, it turned out that these cases foundered in court, not only due to the lack of any evidence but also because the children themselves (as well as their mothers) testified that the father had not done anything untoward to their children. Remarkably, many of these children would later testify that they had simply drawn these pictures to appease the urgings of the social worker in charge of the case.

It is not just suggestions that can play a role in what may bring a child to court, but even more egregious are those cases in which children are led to believe that specific events have occurred when in fact they have not (i.e., false memories for entire events). For me, when it comes to discussing suggested and false memories in children, perhaps the most interesting case came from a divorce trial in Family Court. In this case, the father's attorney wanted an opinion not about false memories that could possibly be affecting the present case but about future false memories! Here, the mother, in her bid to get sole custody of her children, led the children to believe, and to subsequently make claims, that the father had physically and sexually abused them. Following a police investigation that exonerated the father and the mother's subsequent admission that the things she had her children say about the father were fabrications, the father's attorney wanted advice on how to prevent these children from coming to believe that these abuse claims were true at some point in the future. Of course, we know a considerable amount about how false memories come about, but we know very little about how to prevent them in the future. Although we can make recommendations that the facts of what happened be refreshed from time to time, or at the very least, be made accessible when doubts arise as to the veracity of these earlier allegations, this case does provide considerable fodder for a different slant on the study of false memories.

The study of future false memories aside, the one thing about examining the "memory" content of cases and subsequently testifying in court about them is that one learns a considerable amount about what we do and do not know about memory. For example, we learn about naïve beliefs concerning memory that are held by triers of fact (e.g., judges, jurors), something that can be used to justify the presence of a memory expert in any trial involving memory-based evidence. Indeed, as experts we are often confronted with lawyers (and judges) who believe that memory experts provide little information of value beyond that which a layperson does not already know about memory from their own "life" experiences. Of course, research has clearly shown that

memory experts have considerable information that triers of fact are unaware of, information that is invaluable in evaluating the legitimacy of memory as evidence in most, if not all, cases (e.g., Benton, Ross, Bradshaw, Thomas, & Bradshaw, 2006; Magnussen, Melinder, Stridbeck, & Raja, 2010; Simons & Chabris, 2011).

Before turning to an examination of some of these naïve beliefs, particularly ones having to do with childhood memories (see the next section), there are two other key points that need to be articulated. First, as illustrated in the cases described so far in this article, there may be questions that we are asked to address for which there is no answer. Indeed, it is important to acknowledge that some of the questions we confront as expert witnesses are actually valuable inasmuch as they provide fodder for new avenues of research. From a research perspective, when we are asked questions about memory for which there may not be a particularly solid scientific base from which to draw an answer, we should view this as an opportunity to design relevant experiments. Here, a good case in point is the question about the prevention of future false memories. Although one can marshal a reasonable answer based on what we know about memory rehearsal and the factors that affect memory accuracy over time, it does provide research food for thought.

Second, although we often attend trials and provide expert evidence, perhaps the most effective point at which to dispense expertise is before charges have been laid (i.e., at the level of the police). This is simply because such advice can often prevent miscarriages of justice before they have a chance to occur. However, more often than not, many of the cases we deal with involve charges that have already been laid, something that then requires the expert to testify in court about such matters. This need to become involved earlier in the judicial process is best illustrated in the cases that are presented in the next section.

#### **II. Cases Where Memory Matters Most**

Although almost all court cases involve memory evidence of some sort or another, nowhere does it matter more than when the only evidence is memory. These cases are often about historic childhood sexual abuse where accusations involve crimes alleged to have happened in the very distant past. Often these allegations are about crimes that involve only two witnesses – the victim and the perpetrator. In court, the memories of the victim and the perpetrator will obviously differ (otherwise there would be no trial) and it is up to the triers of fact to determine which memory is more reliable – that is, which one is most likely true.

I have been involved in many such cases and have testified both for the prosecution and the defence. More often than not, when it comes to historic sexual abuse cases, it is the defence that relies on advice from a memory expert with the prosecution calling their expert witness primarily in rebuttal. As well, in most of these cases, the alleged abuse is said to have occurred at least 10 to 40 years earlier. Often the events in question went unnoticed by significant others (e.g., parents, teachers, friends) and went unreported at the time. It is because the hallmark of these cases is adult recall of early childhood events that memory expertise is sorely needed.

Over the years, I have evaluated hundreds of complainants' (both male and female) statements concerning historic childhood abuse and have written numerous case reports concerning the reliability of memory for witnessed events that have occurred decades earlier. Starting with the Mt. Cashel trials of child sexual abuse by Christian Brothers in St. John's Newfoundland during the 1990s, a series of trials that generally ended in convictions of the priests who ran the boys' orphanage, I have reviewed statements by adults concerning their memories for events that transpired many decades earlier. Somewhat ironically, one of the many complainants in these cases observed that the main problem with memory researchers was that they were not studying the right thing – the relevant question, he opined, was not whether one could or could not remember the horrific abuse that they had suffered, as he said it was still all too real. Rather, what we should be studying was how we could help victims of abuse forget what had happened.

Despite this admonition, I, like many memory researchers, continued to study factors that contribute to accurate memory for the past as well as those variables that lead to inaccuracies or create false memories. Although some researchers have examined the effects of propranolol and other interventions on the erasure of traumatic memories (e.g., Pitman et al., 2002), something I am certain our admonisher would approve of, most research has focused on what "real" memories of the distant past "look" like in contrast to those recollections that are blatantly false. Despite continued research on this agenda, we still do not have a litmus test that discriminates true from false memories (Bernstein & Loftus, 2009). However, what we do see are some transcripts that appear to detail some remarkable recollections of events that happened some 10 to 40 or more years ago, ones that defy what we have discovered about how memory operates (also see Howe, 2012). In the remainder of this section, I provide some examples of these amazing feats of memory and illustrate how they violate the very memory laws we have uncovered through our rigorous research efforts.

To begin, consider the fact that most cases of early memory involve descriptions of events from the distant past, events that may not have been stressful or traumatic at the time. For example, it is not atypical for complainants to describe touching events that occurred early in what they believe to be an escalating pattern of abuse. These events are said to occur during the normal course of being bathed and are not remembered as being stressful, traumatic, or painful at the time they occurred. Yet, events such as these are routinely "remembered" in considerable detail and are now interpreted as having been traumatic at the time they occurred.

These rather curious "memories" are maintained despite the fact that complainants are also apparently aware of the obvious contradiction – that is, they are aware of the fact that such events would not have been interpreted as traumatic at the time they occurred but now believe that they were traumatic. Thus, consistent with the idea that autobiographical memories are later reinterpreted in terms of our current needs, wants, and wishes, complainants reinterpret ostensibly innocuous events in terms of their current beliefs that they were abused as children.

Of course, the immediate question that comes to an expert's mind is how can (or even, why would) we have a memory for what for all intents and purposes appears to be an innocuous event? Moreover, why would the complainants and the triers of fact believe this to be a gauge of the overall accuracy and veracity of the events being recalled? This is particularly worrisome because the events being reported are ostensibly ones that we all may have experienced but one that few if any of us would ever claimed to have remembered. Indeed, if one asks triers of fact to remember their own early experiences of being bathed, most if not all would be hard-pressed to come up with such a memory! Despite these seemingly obvious questions, such testimony is routinely found in cases of historic childhood sexual abuse.

A second curious finding in the testimony of many complainants is the inclusion of very specific (and ostensibly peripheral) details in events that would have been traumatic at the time when other, more important aspects of the events are missing. For example, why would one remember specific conversations or the locations of other people in the house when one could not even provide an accurate description of the alleged perpetrator? Although we may not be able to provide a precise guideline on what elements of events are truly peripheral and which ones are critical and central, at the very least, we would expect that some ability to describe the perpetrator should be a prerequisite. Indeed, there are transcripts filled with narratives in which the complainant cannot remember important details of the perpetrators who have been allegedly abusing them over a number of years. For example, one complainant (PF) has considerable problems remembering what her perpetrator looked like. That is, when she was asked how old the perpetrator was she replied: "about 20 or about 15 or 13 … or 16, I don't know." When she was asked what he looked like she stated: "I can't remember." When asked what his hair was like she said: "all spiked up, or just normal, I don't know." Finally, when asked what color his hair was she responded: "it's blonde or black, or red brown. Or just, or just like, just bald, without no hair."

Of course, it is also of interest that these same complainants who can report what may be described as tangential information can provide no such information when it comes to other important experiences from the same era in their childhood (e.g., schools, teachers, friends, hobbies). Indeed, some complainants report that their memory for their childhood is extremely poor and has been poor until they suddenly started remembering what they believe to be abusive events. It is only then that memories start to "flood" back. For example, one complainant stated that she could now remember being "... about one year's old, I was in the pram and my dad was trying to pull me out, but before my dad took me out of the pram, one of my sisters got me out of the pram." Of course, we know that such narrative accounts of events from this early an early age (one year old) are not commonplace in the scientific literature. Indeed, such memories are deemed by most if not all memory researchers to be impossible, occurring at the earliest around two to three years old (for a review, see Howe, 2011). Even then, such recollections are observed only very rarely.

To further illustrate these (as well as a number of other) points, consider HR, a woman who was 20 years old at the time of her complaint. She recounts what she believes to be a series of sexual abuse instances from her childhood, starting around the age of 4 years old, including 10 counts of rape between the ages of 6 to 8 years. She also claims that she never remembered any of these events until, following counseling at the age of 15 or 16 years, she started remembering the alleged incidents:

HR: "... I kind of forgot all about it and it suddenly came back to me."

What always strikes me in cases like these is why charges are ever brought in the first place. These memories are relatively recent compared to cases where they have lain "dormant" for 30 or 40 years, and the claim that such memories were forgotten flies in the face of considerable scientific research showing that children and adults do remember their abuse, even some 12 to 20 years later (e.g., Alexander et al., 2005). It is clear that this message has not trickled down to those working in the judicial system, something that clearly needs our attention.

Another curious feature of this case was that when these "memories" did come back, they included considerable details about what the alleged perpetrator said even during an alleged rape incident when she was 6 years old:

HR: "... he told me to keep watching the TV"

HR: "Don't tell anyone I did it, nobody would believe you. It's our little secret."

HR: "And you don't want your mum to call you a liar and things."

HR also provides considerable detail in her police statement about the different rape events. For example, when describing an alleged rape incident from the age of 6 years, she is asked:

"Police Officer (PO): So, would he be on your right or left side?

HR: He'd be on my left.

PO: Okay, can you remember what the sofa was like?

HR: Erm, I think it was only a small, red, if I can remember rightly ... I think it was, no, sorry, it was a grey sofa, like a small grey sofa, like a three seater but a small one.

PO: Okay. D'you know what time of day it was?

HR: Erm, I'd say it was around teatime.

PO: Okay. And there was nobody else in the flat.

### HR: No.

PO: So he took your pants off. What did he do then?

HR: He put them on the floor.

PO: Okay.

HR: And laid me down, cos I was sat up. Erm, so he laid me down on the sofa.

- PO: Were you wearing underwear?
- HR: Yeah, so he took off my pants and my underwear and put them on the floor and lay me, he laid me down on the sofa.

PO: Okay. Were you wearing clothing on your top half?

HR: Yeah.

- PO: What happened to that?
- HR: That stayed on."

HR also claims to remember that the defendant ejaculated inside her and that no contraception was used during this (or any other) alleged rape experience(s). These are things that most 6-year-olds would probably know very little about. Indeed, this detailed description stands in juxtaposition to her inability to remember other important events during that same time period (e.g., what school she attended, teachers, friends). As well, much of what is being "remembered" could simply be schematic information from autobiographical memory (e.g., that she always wore underwear, that there was a grey sofa when she was a child) and does not necessarily represent a specific episodic experience. Again, these sorts of claims (e.g., remembering conversations verbatim, having more mature knowledge than one's age would suggest), are also inconsistent with the literature on memory and memory development and should have served as a red flag for those in the judiciary to proceed with caution when assessing the veracity of HR's allegations. Of course, there are other cautionary signs in this case. These include the type of counseling HR received before suddenly having "flashbacks" of these alleged rape incidents, how the number of events and details within events grew over time and counseling sessions, as well as conversations she had with close friends concerning their sexual abuse experiences. For example, before HR "remembered" any of these alleged experiences, she reports that she was,

HR: "... told that it's [sexual abuse] happened to a couple of girls that I used to know when we were children ... and they're the ones that told me about it happening to them ... and they believed it happened to me too ... so I said, 'Yeah.'"

Although not always diagnostic by themselves, when taken together, all of these signs should have raised a very large red flag. This is something that needs to be communicated more generally in the public domain as well as specifically to people who work in the judicial system. Indeed, this is an excellent example of a case where the memory expert should have been called in before charges were laid, something that in all likelihood would have avoided the filing of charges and a lengthy trial and would have saved the taxpayer considerable expense. In fact, the outcome of this case, one that is relatively unique in my 20 years of experience, was one where both memory experts (the defence and prosecution) agreed that:

"... HR's memories of sexual abuse could be false ... [indeed] the elements described here concerning HR's memory give us cause for concern and we urge the court to exercise appropriate caution about the possibilities of false memories."

Quite rightly, the judge in this case instructed the jurors to find the defendant not guilty on all 10 counts, an outcome that is perhaps an important call to have memory expertise earlier in the judicial process.

Other cases exhibit very similar properties. For example, WM had no memory for her traumatic experiences until she received religious counseling and "prayer" therapy: " ... it's all coming back now, cos it's usually, for a long time I din't remember it until last year." In addition, when specifically queried as to how her memories suddenly came back, WM reveals the following:

"PO: So, what was it that triggered it, what ... how did it come back into your memory? WM: We were praying ... It was, it was two years ago, prayer week, so it must've been about May/June two years ago.

PO: Right.

WM: ... that's when it all started coming back bit by bit. I mean, it's coming back now, it's come back, some of the bits have come back as I've been talking to you."

Here, we have an instance of alleged memories that not only emerge as a consequence of intense memory work (ostensibly through concentration during prayer), but ones that continue to emerge during an interview with a police officer some one to two years later! Worse, for WM these "memories" not only returned during sessions of intense prayer, but also in nightmares. Of course, the scientific literature suggests that dreams and some forms of counseling can lead one to believe that events experienced during these times of altered consciousness are in fact real (e.g., see Loftus & Davis, 2006; McNally, 2003).

Both of these cases are from complainants whose experiences allegedly transpired relatively recently (both were around the 20-years old when they lodged their complaints). Interestingly, more historic cases exhibit many similarities. For example, KC, a woman in her mid 40s, filed a series of complaints about events that had happened some 38 to 40 years earlier following a period of intense counseling for sexual problems. Although there were no notes available from these counseling sessions (a phenomenon that afflicts many of these cases), it was clear that the focus of these sessions was on her sexual history:

"PO: How's it come about that you've decided now to come to the police?

KC: ... I went for some counseling, sexual counseling because I have some issues ... which impacts on my sexual life. "

Moreover, because of what has been discussed in counseling, KC is experiencing additional problems:

"PO: And have you ever had flashbacks or nightmares or anything?

KC: I do get them. I do especially if there's been something on the television about abuse or you read something in the paper."

Here, like in so many other cases, the complainant has had some "help" in terms of getting her "memories" to return as well as in "recovering" specific details. This help is not just in the form of counseling she received, but many of the details KC reported were similar to details found in the popular media, something which she stated influenced her recollection of her own alleged abuse. Here again, the possibility of memory contamination due to suggestion (among other things) led the judge to instruct the jury to find the defendant not guilty on all 13 charges. This case provides another instance where memory expertise, if requested early in the judicial process, might have avoided the necessity of a trial.

#### III. Memory Lessons Learned on the Witness Stand

So, having become an accidental expert witness testifying about memory, what have I learned from this experience? Although as noted, I have learned a considerable amount about people's naïve beliefs about memory in general, perhaps more importantly, I have discovered what people believe about their memories of early childhood. For example, people believe that childhood memories, or certainly those memories for what might later be construed as stressful and traumatic events, can be very accurate, not only for central details (what happened), but also for seemingly peripheral or tangential information (what people were wearing and exact conversations). Although such beliefs are rather commonplace when gauging the accuracy of eyewitness testimony more generally, the litmus test for believability of early memories is linked to the amount of detail provided by the person doing the remembering. This belief persists despite the fact that all of the research concerning our early memories demonstrates the paucity of such detail (e.g., see Howe, 2011, 2012).

So given this 20 or so years of experience as an expert witness, what do I think needs to be done? For me, the key take-home message is we, as memory experts, need to do a better job of translating our research into knowledge that can be more accessible to triers of fact, police interviewers, and the public more generally. I have always viewed the role of the memory expert in legal circles as one that should come to a rapid and early extinction. By this I mean that the facts or "laws" that are discovered by memory researchers needs to become part of nonspecialists' knowledge base or a "culture of memory." It is only then that the admonition of some judges and lawyers will be correct inasmuch as the memory expert will have no additional expertise above and beyond the expertise of the well-informed layperson. Once our expertise becomes part of everyone's knowledge base, memory experts will not have additional information that triers of fact need to know. Of course, this is somewhat naïve as memory research marches on and new discoveries will undoubtedly be made, one that will be pertinent to legal cases in which memory serves as (the only) evidence. Because the reality of the situation is such that the need for memory expertise will not become extinct (or even endangered), my submission is that memory experts need to be involved as early in the process as possible, preferably before charges are laid. Indeed, when memory is an issue in a case, such evidence should be vetted by those with expertise in the science of memory along with other forensic specialists. Such a recommendation, if followed, should reduce the overall costs associated with such legal proceedings if for no other reason than this advice should reduce the number of historic child sex abuse cases that go to trial.

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