Discerning Truth In Memory (previously under the title: "False" Memories?)

(K.D. Lehman MD, New 8/27/2002, Revised 3/11/2005, minor revision 2/18/14)

My perception is that some who work with "recovered" traumatic memories lose credibility by denying *all* memory error concerns in their reaction against the "false memory" movement. I believe that it is much wiser to non-anxiously acknowledge any legitimate concerns about memory errors, *along with* careful discussion of the evidence showing that repressed and dissociated memories are real phenomena that contain historical truth.

In this essay I discuss legitimate concerns about the possibility of memory errors. I discuss why it is *so* important to <u>not</u> suggest specific details regarding traumatic events and to <u>not</u> use imagination/guided imagery tools to "search" for traumatic memories, and why it *so* important to be cautious about making specific accusations on the basis of remembered traumatic events. In this essay I also discuss the compelling evidence proving that repressed memories and dissociated memories are real phenomena, and the evidence indicating that most "recovered" memories have a core of historical truth. I discuss why it is *so* important to <u>not</u> dismiss all recovered memory because of the possibility of memory errors.

I. Legitimate Concerns About the Possibility of Memory Errors

Memory prompts and imagination/guided imagery memory retrieval tools: All of us have had the experience of having our memories prompted. We see a scene in a movie that causes us to remember a similar event in our own lives that we had "forgotten" about for many years. We hear someone else telling a story and are reminded of similar events in our own lives. Or our spouse asks: "Did you remember you have a dentist appointment this afternoon?" To which we respond: "Oh! Thanks for reminding me! I had forgotten all about it." Doctors are aware of this memory phenomena and routinely use specific questions as simple memory prompts in the course of medical evaluations. For example, if I ask "Have you noticed any side effects from the medication?" the patient will usually forget several of the concerns he had intended to ask me about. However, if I prompt his memory with specific questions such as "Have you noticed any changes in your sleep pattern since starting the Zoloft?" he will be much more likely to remember; and will often respond with something like "Oh, yes, I've been having trouble falling asleep since starting the new medication. I wanted to ask you about that – thanks for reminding me."

An especially thorough memory prompt goes something like this:

Friend: "Karl, have you ever met John and Sara Smith?"

Karl: "No, I don't think so."

Charlotte: "Yes you have. We met them that time we were visiting the Johnson's – remember?" Karl: "Are you sure? I don't remember anything."

Charlotte: "It was two years after we got married. We were driving home from your temporary assignment at the State hospital in Virginia. We stopped overnight in Kansas City to visit the Johnson's and the Smiths were there. She kept talking about their grandson who is a park ranger in Wyoming and he kept asking you about your time at Philmont. Don't you remember?"

Karl: "Uh,... I'm not sure. I think maybe I remember. What did they look like?" Charlotte: "She was tall and thin and was wearing this fluorescent pink hat, and he had this dramatic walrus mustache."

Karl: "Oh Yeah! Now I remember! How could I forget that pink hat!...etc."

The psychologist Willem Wagenaar carefully documented the increasing effectiveness of increasingly thorough memory prompts in a simple yet elegant study of his own memories. Each day for four years, he recorded the details of a unique event in his personal life, describing what had happened, the time and location of the event, who had been present, and an additional distinguishing detail of the event. After four years of this recording process, he then went back and tested himself regarding whether he could remember the events described in his diary, carefully probing his memory with different combinations of the memory prompt clues he had recorded. He found that as he used more and more of the memory prompt cues, he remembered more and more of the events. However, even with all of the memory prompt cues he had recorded, there were still events that he could not remember. He then took the process a step further by interviewing people who had been involved in ten of these "forgotten" events. In every one of the ten cases, he eventually remembered the event as the people provided additional details.¹

Many therapists and emotional healing ministers have understood these memory phenomena, and have used a variety of memory prompts to help people access suppressed, repressed, or dissociated traumatic memories. One of the simplest memory prompts is to ask direct questions, such as: "Can you remember being sexually abused at any point in your childhood? Were there any adults or older children who made inappropriate sexual comments? Did anybody ever touch you sexually or force you to do anything you were uncomfortable with?" Some therapists have also used imagination/guided imagery based "recovery tools," such as coaching the person to imagine possible scenarios, in the hopes that memories would be activated if the imaginary scenarios were close enough to real historical events.² These various forms of memory prompts *are* effective for activating suppressed, repressed, and dissociated memories, but unfortunately they can also create memory errors. Memory prompts can be especially problematic if they are combined with suggestive statements such as: "Just look at all the clues. It sure looks like you have been sexually abused by someone in your family. I think the biggest problem is that you just need to let go of denial."

Misattribution, suggestion, and suggestibility: We all use memory prompts as helpful tools in everyday life, but they can contribute to misattribution and suggestion memory errors when used in working with repressed and/or dissociated memories. **Misattribution** is what psychologists call a "binding error," an error in which the brain links the content of a memory with an incorrect context. For example, several years ago I was talking with a close friend, discussing a particular question regarding human behavior. At a point of disagreement my friend related a story illustrating that a certain phenomena was indeed possible, and presented this anecdotal evidence

¹ Wagenaar, W.A. "My memory: A study of autobiographical memory over six years." *Cognitive Psychology*, Vol 18, 1986. Pp 225-52.

² Surveys of psychotherapists conducted in the 1990's found that many used this kind of guided imagery in order to stimulate retrieval of "lost"/buried childhood memories. See, for example, Poole, D.A., Lindsay, S.D., Memon, A., and Bull, R. "Psychotherapy and the recovery of memories of childhood sexual abuse: U.S. and British practitioner's opinions, practices, and experiences." *Journal of Consulting and Clinical Psychology*, Vol 63, 1995. Pp 426-87.

as something that had happened to one of his personal acquaintances. After a moment of thought I realized that his story was actually from a fiction novel (well written and very convincing, but fiction). When I responded with "I think I read that in a book – isn't that from...," he immediately recognized and acknowledged his misattribution error. He correctly remembered the content of the story, but had *incorrectly* linked the content of the story to the context of a conversation with one of his friends. Suggestion supplies (suggests) a specific possibility, instead of leaving the question, statement, or situation completely open. For example, an open ended question, carefully avoiding any suggestion about the appearance of the cashier, would be "What do you remember about the person at the cash register?" In contrast, "Do you remember whether the person behind the cash register was wearing a white apron?" would be a mildly suggestive question – gently presenting (suggesting) the specific option of the white apron. "What do you remember about the man with the white apron who was running the cash register?" would be much more suggestive – strongly implying (suggesting) that the person was a man, and that he was wearing a white apron. Suggestibility refers to the vulnerability of the human mind to suggestion – the way in which our minds often allow suggestion to lead us into misattribution memory errors.

Research regarding misattribution and suggestibility: There is substantial research data supporting the reality and importance of misattribution and suggestibility.³ For example, ten months after an El Al cargo flight crashed into an apartment building outside of Amsterdam, Dutch psychologists questioned colleagues about their memories of television footage of the crash. The researchers asked the simple question: "Did you see the television film of the moment the plane hit the apartment building?" 55% of the respondents said "yes," and many claimed to have clear memories, including details such as the speed and angle of the plane as it hit the building, whether the plane was on fire before it hit the building, and where the plane fell after impact. We know that these people constructed visual images in their imaginations on the basis of newspaper reports and other information, and then misattributed these images to non-existent video footage, because there was no television footage of the accident.⁴ This research provides a good example of how suggestion encourages misattribution. The intentionally suggestive question obviously implying that there had been TV footage of the moment of impact led people to make misattribution source errors – mistaking their internal imagery as memory of film footage instead of imaginary imagery associated with other sources of information and/or discussion.

Research studying misattribution, suggestion, and suggestibility indicates that an <u>imaginary</u>, <u>fictitious</u> scenario will begin to feel subjectively more and more "real" and "true" if a person repeatedly imagines the fictitious scenario, and especially if the person imagines the fictitious scenario in a setting where the scenario is presented as a possible/probable real scenario. For example, if a person is repeatedly asked if he remembers a specific scenario, he will usually imagine the scenario in his mind's eye each time it is described. Even if the scenario is fictitious,

³ Schacter, D.L. *The Seven Sins of Memory* (New York: Houghton Mifflin) 2001, pp 88-137 provides a "written for lay people" review of this research. Note: Dr. Schacter doesn't adequately acknowledge the importance of repressed or dissociated memory, and his logic is faulty in his argument dismissing ritual abuse, but excepting these important blind-spots in his presentation, he provides an excellent review of the research regarding misattribution and suggestibility.

⁴ Crombag, H.F.M., Wagenaar, W.A., and Van Koppen, P.J. "Crashing memories and the problem of 'source monitoring.' *Applied Cognitive Psychology*, 10, 1996. pp 95-104.

the images will become familiar because he has been repeatedly revisiting the mental images. Even *without* any suggestion, if significant amounts of time go by, the person can begin to misattribute the source of the images that feel familiar, and begin to believe that he is remembering an actual event as opposed to remembering imagined images. If the person repeatedly imagines the fictitious scenario in a setting where it is presented as a possible/probable real scenario – serious misattribution errors become soberingly common⁵.

Recent PET scan studies demonstrate that the visual images associated with imagined events are generated by some of the same neurological circuits that contribute to the visual perception of actual events. This neurological "data point" is certainly consistent with the clinical observation that incidents that people frequently imagine can come to feel like events that actually occurred. Research studies also show that people can distort the *details* of a *true* memory if erroneous information is suggested in certain ways (such as asking leading questions)⁷.

Note that misattribution errors can occur spontaneously, even without any suggestion. Suggestion increases the frequency and severity of misattribution – it presents a specific focus around which misattribution errors can occur, and in more intensely suggestive situations, actively invites and encourages misattribution errors. Suggestibility depends on misattribution, since suggestion will have no effect unless misattribution also occurs. That is, misattribution is required in order for suggestions to produce actual memory errors. To keep things in perspective, remember that while suggestion increases the frequency and severity of misattribution, it does not *always* cause misattribution. In fact, suggestion *often* fails to produce memory errors, even in very suggestive situations (most studies on suggestion and suggestibility report a substantial proportion of subjects who do *not* demonstrate misattribution errors in response to the suggestive questions, statements, or situations).

"Downgrade" memory errors: In our experience, memory errors such as misattribution usually downgrade the painful implications of traumatic memories. It is especially important to understand how this can affect the perceived identity of a perpetrator. For example, a person who was sexually abused by her father might "remember" her first grade teacher as the perpetrator because the implications of this false perpetrator identity would be much less painful than the truth. We are familiar with more than one situation in which there are clear clinical indicators that the person reporting abuse memories was indeed sexually abused, but also clear corroborating

⁵ See, for example, Bruck, M., Ceci, S.J., and Hembrooke, H. "Children's reports of pleasant and unpleasant events. In D. Read and S. Lindsay (eds.), *Recollections of Trauma: Scientific Research and Clinical Practice*, (New York: Plenum Press) 1997. pp 119-219; Hyman, I.E., Husband, T.H., and Billings, F.J. "False memories of childhood experiences." *Applied Cognitive Psychology*, Vol 9, 1995. pp 181-97; Porter-S; Yuille-JC; Lehman-DR, "The nature of real, implanted, and fabricated memories for emotional childhood events: implications for the recovered memory debate." *Law-Hum-Behav*. 1999 Oct; 23(5): 517-37 and Zaragoza-MS; Lane-SM, "Source misattributions and the suggestibility of eyewitness memory." *J-Exp-Psychol-Learn-Mem-Cogn*. 1994 Jul; 20(4): 934-45.

⁶ Kosslyn, S.M. (1994). *Image and Brain*. (Cambridge: MIT Press) 1994.

⁷ See, for example, Miller-MB; Gazzaniga-MS, "Creating false memories for visual scenes." *Neuro-psychologia*. 1998 Jun; 36(6): 513-20, Bruck-M; Ceci-SJ; Francoeur-E; Barr-R, "I hardly cried when I got my shot!" Influencing children's reports about a visit to their pediatrician. *Child-Dev*. 1995 Feb; 66(1): 193-208, and Weingardt-KR; Loftus-EF; Lindsay-DS, "Misinformation revisited: new evidence on the suggestibility of memory." *Mem-Cognit*. 1995 Jan; 23(1): 72-82.

evidence indicating that the specific person accused of the abuse was not the true perpetrator.8

An important and common logical error — "If it causes pain, it must be true": I used to think "A thought/image that isn't associated with a true historical event can't produce negative emotions, so if the person has intense negative emotions, then the thought/image associated with the negative emotions must be a memory of a true historical event." However, as I have thought more carefully about this, I have realized that there are many "real life experience" data points that show this to be erroneous thinking. For example:

Bone cancer scare: A number of years ago, I experienced persistent pain in my right leg, and eventually went in for x-rays to figure out what was the matter. Being a physician, I asked the technician to let me look at the films before she took them to the radiology department. Unfortunately, I was able to read the x-rays just well enough to make myself miserable. I could see that there was a lump towards the top of my right femur. Several days later, the radiologist gave me the good news that the lump indicated a painful but harmless condition – myositis ossificans – as opposed to bone cancer, which is often hard to treat, rapidly progressing, and eventually fatal. However, during the several days between the x-ray and the radiology report, I thought I probably had bone cancer. During these miserable several days, horrible scenarios, and associated thoughts and emotions, flooded into my mind. I imagined painful medical procedures, toxic chemotherapy, tremendous medical bills, and then dying prematurely. "What will happen to Charlotte? Have I provided for her adequately?...etc." I was sad and frightened, with intense negative emotions and also physical manifestations associated with adrenaline release (sweating, increased heart rate, increased respiration rate). Just *believing* that I had bone cancer caused me to experience intense negative emotions, even though it wasn't true.

Classic hypnosis demonstration: A classic hypnosis demonstration, which has been repeated by a number of different practitioners, provides a dramatic data point. While the demonstration subject is in hypnotic trance, the hypnotist takes a pencil and tells him that the eraser is the red hot end of a probe used for some kind of medical procedure. The hypnotist informs the subject that she needs to test something, and therefore needs to touch them with the hot probe for one moment. As the hypnotist touches him/tries to touch him, he will express and demonstrate intense fear, and if she does actually touch him with the pencil eraser, he reports intense, burning pain. The demonstration subject experiences intense negative emotions, and subjective physical pain, even though the traumatic event is entirely illusory.

Vicarious "Ouch!": When I was in Jr. High school, we would play various running games during our lunch break. For reasons I don't understand, there was a pipe sticking up in the middle of one of the fields we would run in. The pipe was just the right height so that the top would hit an average Jr. High kid squarely in the crotch. One unfortunate day, one of my friends hit the pipe at full running speed. Mike crawled all the way from the playing field to the nurses office, and the rest of us boys were crossing our legs, wincing, and groaning in sympathetic pain just from watching him. Just thinking about this story still makes me cringe, and often when I tell the story, all the guys in the room cringe in the same way. We experience negative emotions from thinking about and visualizing this scenario, even though we are *not* remembering an event that actually happened to us.

⁸ In one of these situations, other individuals (that we personally know and trust) were present with the person being accused and the person reporting the abuse at the exact time and place that the abuse supposedly occurred.

Simple experiment: There is a simple experiment you can do right now – imagine, vividly, something scary and painful, such as somebody holding you down and chopping off one of your fingers. Most people will experience some negative emotions just by imagining this scenario, even though it has never happened to most of us (look at your hands – how many fingers do you have?).

In light of the above discussion, consider what could happen in a psychotherapy group where the leader and participants don't understand these principles and are not careful regarding suggestibility: a new member is brought into the group because her therapist thinks she has thoughts and emotions consistent with sexual abuse. As she listens to others talk about sexual abuse memories week after week, she often has images in her own mind corresponding to the stories others are telling – just like images of imagined scenes come into your mind when you read a story. If the new member's father was alcoholic, the group leader might say "Your symptoms sure look like sexual abuse, and your father is alcoholic. Alcoholics often molest their children. I'm guessing that your father probably molested you. I think you just need to let go of your denial." Eventually, the therapist might suggest "I want you to imagine your father molesting you. That might help you connect with the memories." If the person does imagine her father molesting her, she will probably have negative thoughts and emotions associated with the imagined scenario (even if the imagined events never occurred – just as you experienced negative emotions as you imagined somebody cutting off your finger). The therapist and group members could then respond: "Why are you upset? If it didn't really happen, it wouldn't be upsetting, I think you just need to let go of your denial." If they succeed in convincing the new group member that her father did, indeed, molest her, she could be flooded with negative emotions just from thinking about family systems consequences: "Oh my Gosh – this is so horrible. I have worked so hard to build a good relationship with my father since he stopped drinking. How could he have betrayed me like this? How can I go home for Christmas? How will I explain to Mom that I don't want to come home for Christmas? I wonder if he has molested my kids?...etc." If you come to believe that your father molested you, you will predictably have intense negative emotions, even if it didn't actually happen.

The memory phenomena and psychotherapy practices just discussed are the basis for legitimate concerns about the possibility that memory errors might occur in the context of psychotherapy or emotional healing ministry.

II. Repressed and Dissociated Memories are Real and True Phenomena

Personal experience with repressed and/or dissociated memories that have been recovered:

As described in "Dissociation, Repression, Denial, and Avoidance: 'Where Did Kindergarten and First Grade Go?' " on the Case Studies page of our website, my memories of being in kindergarten and first grade classrooms at Oakton School were completely repressed and/or dissociated until the last couple years. As also described in this case study, the recovered memories that have come forward during my own emotional healing work fit many of the lies I have believed and the corresponding negative emotions I have experienced since grade school, and Charlotte and I have observed lasting changes in my thoughts, emotions, and behaviors as I have been working through these recovered memories. My personal experience is that repressed and dissociated memories are real and true phenomena.

Clients with repressed and/or dissociated memories that have been recovered: Charlotte and I have worked with a number of people who have recovered memories that they had not been able to

remember consciously for many years. In each case, the recovered memories have matched certain lies, negative emotions, and behaviors in the person's life. Some of these people had signs and symptoms that met full DSM IV9 diagnostic criteria for conditions such as phobias, panic disorder, obsessive compulsive disorder, eating disorders, major depression, various addictive disorders, and Post Traumatic Stress Disorder, and had been on corresponding psychiatric medications for years. The corresponding problems in the person's adult life have resolved as the truth-based pain, lies, sins, and demonic infection associated with the recovered memories were resolved, and in several cases I have had the privilege of steadily decreasing and/or stopping the psychiatric medications. I have continued to follow a number of these people, and have verified that their clinical improvement has been maintained for several years now. In some of these situations we have also been able to obtain corroborating evidence supporting the recovered memories. For example, one person has siblings who have corroborated many of the specific details in the previously dissociated memories that have now come back to her. Another person has medical and legal records verifying the childhood events she had repeatedly stated she could not remember, but then suddenly recovered during a session in my office.

Note: As of May 2004, we have two videos that are available to the public that record live ministry sessions where the persons receiving ministry "recover" and resolve traumatic childhood memories that had previously been "missing" (not available to their conscious minds). The videos also include follow-up interviews where they describe several dramatic positive changes that have unfolded spontaneously since the ministry sessions on the tapes.¹⁰

Colleagues with corroborating evidence: Colleagues that we know and trust have also obtained corroborating evidence supporting the validity of recovered memories. In several situations, careful medical examination revealed scar tissue exactly matching traumatic memories recovered during emotional healing ministry. It is significant to note that "hidden" scar tissue was found in places like the inside of the mouth and the inside of the vagina, where it would only be found by careful medical examination and where the person receiving ministry would not even be aware of it (addressing the concern that people receiving ministry might make up traumatic memories to match their scars). Note: We would like to hear from others who have obtained strong corroborating evidence verifying the historical accuracy of recovered memories.

2004 Research demonstrating an *active forgetting process*, and also identifying corresponding neurological phenomena: Collaborating scientists at Stanford University and the University of Oregon have just published research results that clearly demonstrate the existence of an *active forgetting process* that looks a lot like suppression/repression. This study shows that we can *choose* to "look away" from selected memory content, and that this voluntary "looking away" impairs later attempts to recall the selected material. These research results also identify, with functional magnetic resonance imaging (MRI), neurological phenomena that

⁹ DSM IV is short for the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth edition (American Psychiatric Association: Washington, DC, 1994) – the standard diagnostic listing/tool used by mental health professionals.

¹⁰ The videos, "Grace: Childhood Abuse Memory," and "Lisa: Childhood Surgery, Panic Attacks, and Abreaction" are available from the Store page of our web site, www.kclehman.com. The explanatory comments discussing the videos are also available (free download) from the "Case Studies" or Store pages of our web site.

¹¹ This was described by Dr. Ed Smith during the advanced apprenticeship training July 16-20, 2002.

correspond to this active forgetting process. One fascinating aspect of this research is that it doesn't even involve emotionally painful memories – this rigorous and careful study shows that we can choose to "look away" from even mundane memory content.¹²

Research regarding the existence of repressed and dissociated memories, and/or the historical accuracy of recovered memories: Note: Many of the studies described below also included other components. We are describing only the material in each study that addresses the question of whether repressed and dissociated memories are real phenomena and/or the question of how well recovered memories correspond to historical truth.

Andrews, B., Brewin, C., Ochera, J., Morton, J., Bekerian, D., Davies, G., and Mollon, P. "Characteristics, context and consequences of memory recovery among adults in therapy." *British Journal of Psychiatry*. 1999 August; 175:141-146.

One-hundred and eight therapists provided information on all clients with recovered memories seen in the past three years, and were interviewed in detail on up to three such clients. Of a total of 690 clients, therapists reported that 32% started recovering memories before entering therapy. According to therapists' accounts, very few of the 236 detailed client cases appeared improbable and corroborating evidence supporting the historical truth of recovered memories was reported in 41%. 78% of the clients' initial recovered memories either preceded therapy or preceded the use of memory recovery techniques.

Bagley, C. (1995). "The prevalence and mental health sequels of child sexual abuse in community sample of women aged 18 to 27. Child sexual abuse and mental health in adolescents and adults." Aldershot: Avebury.

This book describes a study of women between 18 and 24 years of age who had been removed from the home 10 years previously by social services due to intra familial sexual abuse. Of the 19 women for whom there was evidence of serious sexual abuse, 14 remembered events corresponding to their records. Two remembered that abuse had taken place but could recall no specific details, and three had no memory. Two of the last three described large gaps in their memories of childhood corresponding to the ages when abuse had taken place.¹³

Bull, D. "A verified case of recovered memories of sexual abuse." *American Journal of Psychotherapy*. 1999 Spring; 53(2): 221-224.

This case study describes the experience of a 40-year-old woman, with no history of mental illness and ten years of exemplary professional work, who recovers memories of childhood sexual abuse through a call from her youth pastor in whom she had confided as an adolescent. This reminder triggered a severe depression, suicidal action, and the need for hospitalization. The woman reported no memory of the sexual abuse prior to the reminder phone call. Corroborating evidence supporting the historical truth of the recovered memories was obtained (the woman's older sister reports that she witnessed the abuse).

¹² Anderson, M. C., Ochsner, Kevin N., et al. "Neural Systems Underlying the Suppression of Unwanted Memories." *Science*. January 9, 2004, 303:232-235.

¹³ Adapted from 7-31-02 e-mail from Lynn Crook, M. Ed., to Ellen Lacter, Ph.D.

Chu JA, Frey LM, Ganzel BL, Matthews JA. "Memories of childhood abuse: Dissociation, amnesia, and corroboration." *American Journal of Psychiatry*. 1999 May; 156(5):749-755.

90 female patients admitted to a unit specializing in the treatment of trauma-related disorders underwent a structured interview that asked about amnesia for traumatic experiences, the circumstances of recovered memory, the role of suggestion in recovered memories, and independent corroboration of the memories. A substantial proportion of participants with all types of abuse reported partial or complete amnesia for abuse memories. For physical and sexual abuse, early age at onset was correlated with greater levels of amnesia. Participants who reported recovering memories of abuse generally recalled these experiences while at home, alone, or with family or friends. Although some participants were in treatment at the time, very few were in therapy sessions during their first memory recovery. Suggestion was generally denied as a factor in memory recovery. A majority of participants were able to find strong corroborating evidence supporting the historical truth of their recovered memories.

Corwin, D. & Olson, E. Videotaped discovery of a reportedly unrecallable memory of child sexual abuse: Comparison with a childhood interview taped 11 years before. *Child Maltreatment*. 1997; 2(2), 91-112.

This article presents a unique case involving the recovery of traumatic memory by a 17-year-old victim of documented childhood sexual abuse. The authors present the history, verbatim transcripts, and behavioral observations of a child's disclosure of sexual abuse to Dr. David Corwin in 1984 and the spontaneous return of that reportedly unrecallable memory during an interview with Dr. Corwin 11 years later.

The case was originally referred to Corwin for a court-appointed evaluation of allegations of sexual and physical abuse. Corwin had three interviews with the child (Jane Doe) and also met with both parents. Dr. Corwin's evaluation, along with previous documentation, strongly supported the child's allegation of both physical and sexual abuse by her mother. In her first interview, her disclosure was spontaneous and not in response to a question directed to sexual abuse. Jane made consistent statements regarding the identity of her sexual abuser and the nature of the abuse in all three forensic interviews. Her accounts included sensory detail and she reported detailed maternal threats not to disclose. Parental behavior during the interviews and psychological testing of both parents was also consistent with the mother having abused Jane. Based on the weight of the evidence the court gave Jane's father full custody and denied visitation to Jane's mother. In addition to the interviews, the records included protective services reports, court declarations by the parents, pleadings, court decisions, reports by prior evaluators and therapists, letters from Jane's parents, friends, and relatives, and Jane's medical records.

After her father's death, Jane wanted a closer relationship with her mother. Jane no longer had any memory of the abuse but did remember that she had alleged abuse. Her mother denied the abuse allegations and told Jane that her allegations were based on pressure by her father so he could get custody of her. Jane contacted Dr. Corwin and told him that she would like to see the videotapes of herself because she was unable to recall the actual events. Jane said: "I've chosen to believe that my real mom didn't do anything, even though I don't really remember if she did or not."

Before showing her the videotape, Corwin asks Jane to remember everything that she can about

her interviews with him at age 6. Corwin asks her if she remembers "anything about the concerns about sexual abuse." Jane says: "No. I mean, I remember that was part of the accusation, but I don't remember anything – wait a minute, yeah, I do." Corwin asks her what she remembers. Jane responds, "My gosh, that's really, really weird." This is followed by tears and Jane's speech becoming choked up. Jane then reports some of the details described in the interviews when she was 6 years old. Corwin then shows Jane the videotapes of his interviews with her when she was 6 years old. After watching the videotapes, Jane believes that the child on the tapes was telling the truth.

Both the child's disclosure at age 6 and the young woman's sudden recall of the abuse at age 17 after several years of reported inability to recall the abuse are recorded on videotape.¹⁴

Duggal S, Stroufe LA. "Recovered memory of childhood sexual trauma: A documented case from a longitudinal study." *Journal of Traumatic Stress*. 1998 April; 11(2): 301-21.

The authors present the case of a child with documented history of sexual abuse, chronicled evidence of amnesia (no recall of the abuse in extensive interviews and consecutive written assessments as a teenager), and then spontaneous recall of the abuse memories outside of therapy at age 19. This account contains the first available *prospective* report of memory loss in a case in which there is both *documented evidence of trauma* and *evidence of recovery of memory*. The case emerged as part of a broadband, large-scale study of children followed closely from birth to adulthood which was not focused on memory for trauma. Prospective data gathered in a neutral research context, and corroborated and supplemented by retrospective information, circumvent many limitations of previous retrospective accounts of recovered memories.

Feldman-Summers S; Pope KS. "The experience of forgetting childhood abuse: a national survey of psychologists." *J Consult Clin Psychol*. 1994 Jun; 62(3):636-9

A national sample of 330 psychologists were asked whether they had been abused as children and, if so, whether they had ever forgotten some or all of the abuse. Almost a quarter of the sample (23.9%) reported childhood abuse, and of those, approximately 40% reported a period of forgetting some or all of the abuse. The major findings were that (a) both sexual and nonsexual abuse were subject to periods of forgetting; (b) the most frequently reported factor related to recall was being in therapy; (c) approximately one half of those who reported forgetting also reported corroboration of the abuse; and (d) reported forgetting was not related to gender or age of the respondent but was related to severity of the abuse.

Fish V., Scott C.G. "Childhood abuse recollections in a non-clinical population: forgetting and secrecy." *Child Abuse Neglect*. 1999 Aug;23(8):791-802

Fifteen hundred people were randomly selected from the membership of the American Counseling Association and sent a questionnaire regarding childhood abuse history. Four hundred and twenty-three usable questionnaires were returned and analyzed. Thirty-two percent of the sample reported childhood abuse. Fifty-two percent of those reporting abuse also noted periods of forgetting some or all of the abuse.

¹⁴ Adapted from 7-31-02 e-mail from Lynn Crook, M. Ed., to Ellen Lacter, Ph.D.

Herman, J. L., & Harvey, M. R. "Adult memories of childhood trauma: A naturalistic clinical study." *Journal of Traumatic Stress.* 1997 October; 10(4), 557-571.

The clinical evaluations of 77 adult psychiatric outpatients reporting memories of childhood trauma were reviewed. A majority of patients reported some degree of continuous recall. Roughly half (53%) said they had never forgotten the traumatic events. Two smaller groups described a mixture of continuous and delayed recall (17%) or a period of complete amnesia followed by delayed recall (16%). Patients with and without delayed recall did not differ significantly in the proportions reporting corroboration of their memories from other sources. Idiosyncratic, trauma-specific reminders and recent life crises were most commonly cited as precipitants to delayed recall. A previous psychotherapy was cited as a factor in a minority (28%) of cases. By contrast, intrusion of new memories after a period of amnesia was frequently cited as a factor leading to the decision to seek psychotherapy.

Martinez, Taboas, A. "Repressed memories: Some clinical data contributing toward its elucidation." *American Journal of Psychotherapy*. (1996) Spring; 50(2), 217-30.

This article offers two case reports that include amnesia of traumatic memories, recovery of traumatic memories, and corroborating evidence for the traumatic memories. The author documented that both patients had no conscious memory of their childhood abusive experiences, documented the recovery of childhood traumatic memories in therapy, and then obtained definite and clear-cut independent corroborating evidence supporting the historical truth of the abuse memories in both cases.

Nash, M.R. "Memory distortion and sexual trauma: The problem of false negatives and false positives. *The International Journal of Clinical and Experimental Hypnosis*, 1994; 42, 346-362.

Nash describes a 42 year old man who entered therapy because of bothersome, intrusive images that he thought might allude to a sexual experience. He eventually recovered a traumatic sexual memory, and then obtained corroboration from one of those he recalled as being present – a cousin who acknowledged participating in the event, and who reported retaining clear memory of the episode since it had happened.

Penfield, Wilder. "The Permanent Record of the Stream of Consciousness." *Proceedings of the Fourteenth International Congress of Psychology, Montreal, June 1954.* (Amsterdam: North-Holland Publishing Company), Wednesday, June 9, pages 47-69, and Penfield, Wilder, and Perot, P. "The brain's record of auditory and visual experience. A final summary and discussion." *Brain*, (1963) 86:595-696. In an extensive series of surgical case studies, Penfield and Perot document that direct electrical stimulation of the temporal lobe can elicit vivid, detailed recall of autobiographical memories that is qualitatively more like *re-experiencing* the original events than like the normal subjective experience of remembering. The patients report that the detail they *re-experience* (see, hear, etc.) during stimulation is much more vivid and minute than they can normally recall regarding the events in question (often reported to be true autobiographical events that the person also has "normal" memory for). Patients report that they

¹⁵ Drs. Penfield and Perot noted that in some of the cases, the accuracy of the recalled details were verified by family members who could corroborate memory content, or by verifying the accuracy of other details, such as the melody and words of music the patients sang as the "memory songs" were being "heard" in their minds. Note that Drs. Penfield and Perot were stimulating the temporal cortex as a part

can't retain/recall the same level of details, even moments after the stimulation is stopped. For example, if you are looking at this sentence, and I ask "Did I use 'you are' or 'you're'?" you could answer with little difficulty. However, you would have trouble accurately remembering such detail, even moments after reading the sentence, if you were not looking at the sentence when I asked you the question. The important point for this discussion is that these case studies demonstrate that the mind can carry detailed, accurate autobiographical memory content that is not usually available to the conscious mind.

Sacks, Oliver. *The Man Who Mistook His Wife for a Hat*, (Harper Collins: New York, NY) original copyright 1970, most recent edition 1990. Dr. Oliver Sacks, a clinical neurologist, describes several fascinating case studies in which biological changes in a patient's brain resulted in "recovering" memories that had previously been inaccessible to the person's conscious mind.

"Recovered" memories with temporal lobe stroke and associated seizures (pages 132-149): Dr. Sacks describes the case of an 88 year old woman who began remembering vivid details from her early childhood following a temporal lobe stroke and the onset of associated temporal lobe seizures. This woman had been born in Ireland. Her father had died before she was born, and her mother died when she was five years old. Before the temporal lobe seizures started, she had no conscious memory of her mother, her mother's death, or any other details from the first five years of her life. She could not remember this material, even with repeated, intentional, directed effort, trying to bring these memories into her conscious mind. During the temporal lobe seizures, she did not just remember details from the first five years of her life, but *re-experienced* them in vivid, detailed memory hallucinations (flashbacks): "...I feel I'm a child in Ireland again – I feel my mother's arms, I see her, I hear her voice singing." Then, after the seizures stopped with resolution of the small stroke, she was again unable to remember anything from the first five years of her life. She could remember that she *had* remembered the "lost" material – she could remember the recent adult experience of remembering the "lost" material – but she could no longer consciously, directly remember the "lost" material.

Note that the observations and neurology in this case study are consistent with the hypothesis that these memories were "blocked" by psychological defenses such as repression and/or dissociation. As Penfield and Perot thoroughly demonstrated and documented, direct stimulation of the temporal lobe, such as would occur with seizures in the temporal lobe, can directly activate

of a neurosurgical procedure, making observations about memory phenomena as a side issue. They were not carefully documenting corroboration as a part of systematic memory research. Their observations therefore do not carry the same scientific evidence "weight" as carefully controlled cognitive psychology experiments. Nevertheless, when I took the time to go through their original material (the articles referenced above, which include verbatim transcripts from their interactions with patients during temporal lobe stimulations), I am left with the clear overall impression that the direct stimulation elicited accurate recall of extraordinary detail not usually accessible to the conscious mind (as described above).

¹⁶ Regarding the reference to a stroke "resolving:" With any true stroke, there is a small core of tissue that dies, and a much larger area that is damaged, but that does not die. A stroke never *completely* resolves, because the dead tissue is never recovered, but the injury to the larger damaged area does resolve with time. Seizures in the area of a stroke are mostly caused by the *acute* inflammation and irritation associated with the stroke. The acute inflammation and irritation resolve as the dead tissue consolidates into a small scar and as the temporary injury to the larger area is healed. Sometimes there is a small, lingering irritation associated with the scar tissue, but seizures associated with strokes usually resolve as the acute inflammation and irritation resolve.

memory circuits. And direct activation of the memory circuits would bypass higher brain function psychological defenses moderated by the frontal cortex. If this were the case, it would be *expected* that the memories would be "lost" again once the temporal lobe seizures stopped. The psychological defenses had been temporarily bypassed by the direct stimulation of the temporal lobes, but they were still in place, and would be expected to resume their function of blocking the memories as soon as the direct stimulation bypass stopped.

"Recovered" memories with increased L-Dopa dosage (pages 150-152): Dr. Sacks describes the case of a 63 year old woman with Parkinson's disease who began to report vivid, detailed memories from her youth in the 1920's after her dose of L-Dopa was increased. "The patient requested a tape-recorder, and in the course of a few days recorded innumerable salacious songs, 'dirty' jokes and limericks, all derived from party-gossip, 'smutty' comics, night clubs, and music halls of the middle and late 1920's." "Nobody was more astonished than the patient herself: 'It's amazing,' she said. 'I can't understand it. I haven't heard or thought of those things for more than 40 years. I never knew I still knew them. But now they keep running through my mind." It is also interesting to note that these memories were "lost" again when the L-Dopa dose was decreased: "Increasing excitement necessitated a reduction of the dosage of L-Dopa, and with this the patient, although remaining quite articulate, instantly 'forgot' all these early memories and was never again able to recall a single line of the songs she had recorded."

Note that Dr. Sacks did not obtain independent, corroborating evidence to verify the details of the songs and other details of the first patient's early childhood, but everything she remembered was consistent with the facts that were documented (that she had grown up in Ireland with her mother, had been orphaned at 5 years old, and had then moved to America). He did not obtain independent, corroborating evidence to verify the details of the 1920's songs, jokes, etc. recorded by the second patient, but his subjective impression was that they were accurate reproductions, and that they certainly fit the "flapper" era of the patient's youth. Because of the lack of independent, research grade collaboration, these case studies do not *prove* anything, but they strongly indicate that it is common to carry material in our minds that we cannot consciously remember.

Note also that the details of these case studies *do not* indicate whether the memories were repressed, dissociated, or just "lost" in the filing system, but they *do* indicate that the patients' minds carried memory content that they could not access consciously. It is interesting to note that the "lost" material in the one patient's case included her childhood memories up to and including the death of her mother.

"Recovered" memories with frontal lobe injury (pages 161-165): Dr. Sacks describes the case of a young man who murdered his girl friend while under the influence of the powerful hallucinogenic drug PCP, had no conscious memory of the murder, and then experienced spontaneous return of the "lost" memory four years later after traumatic injury to the frontal lobes of his brain. This case study is especially valuable because of the details that are carefully documented and corroborated, both legally and medically. There was enough carefully documented legal evidence to convict the young man of murder, even though thorough legal, neurological, and psychiatric examination (including hypnosis and sodium amytal injection – "truth serum") concluded that he had no conscious memory of the crime. An additional important point is that the details of the murder were so macabre that they were not revealed to the public or to the patient – the forensic examiners discussed them only with the judge.

During the fifth year following the murder, the patient was injured in a bicycle accident, sustaining serious damage to both frontal lobes of his brain. As he awoke from the coma resulting from this injury, he began having nightmares, and then vivid, detailed hallucinations of reexperiencing the murder. Dr. Sacks wondered whether the content of his nightmares and hallucinations were psychotic/fabricated/imagination, or whether they were accurate memory. He obtained permission to examine the forensic details documented in the legal records, previously known only to the judge and the forensic examiners, and found that every detail described by the patient matched exactly the details documented by the forensic examiners: "He was questioned in great detail, with the greatest care to avoid any hints or suggestions – and it was very soon clear that....he now knew the minutest details of the murder: all the details revealed by forensic examination, but never revealed in open court – or to him."

Note that the patient accepted his sentence to an asylum for the criminally insane with the feeling that he deserved it ("I'm not fit for society"), and remained there for four years prior to his bicycle accident, still claiming that he had no conscious memory of the murder. Furthermore, he remained in the institution for the criminally insane after the bicycle accident and the return of conscious memory of the murder. Another significant point is that before the bicycle accident he felt some guilt about the murder, but did not seem to be intensely troubled by it. However, following the accident, when he reported spontaneous return of memories of the murder, he became tormented by these memories to the point that he attempted suicide twice, and had to be physically restrained and heavily sedated to prevent further suicide attempts. These observations/facts would argue against the possibility that he was simply lying about not having any memory in hopes of escaping or moderating punishment.

Note also that injury to the patient's frontal lobes would be consistent with losing higher brain functions that had been blocking the memories of the murder through psychological defense mechanisms. This would be consistent with the observation that, after the injury, the horrific details of the memory came obsessively, constantly, and intrusively into his consciousness – as if he had suddenly lost the ability to "block" them from his conscious mind. This hypothesis that injury to his frontal lobes weakened/disabled the psychological defenses that had previously blocked these memories is also consistent with the observation that the memories continued to be accessible. That is, there was clear neurological evidence of permanent frontal lobe damage, and this fits with the clear psychological evidence of irreversible loss of his ability to "block" the traumatic memories from his conscious mind.¹⁷

Schooler, J.R. "Seeking the core: The issues and evidence surrounding recovered accounts of sexual trauma." *Consciousness and Cognition*, 1994; 3, 452-469.

The 32 year old man described in this case study reports that he had forgotten about several incidents of molestation that had occurred during early adolescence. The case study records him as stating explicitly "If you had done a survey of people walking into the movie theater when I saw the movie...asking people about child and sexual abuse, 'Have you ever been, or do you know anybody who has ever been,' I would have absolutely, flatly, unhesitatingly, said no!" However, at the age of thirty, after watching a movie portraying a person struggling

¹⁷ The memories did not come forward *temporarily* during the crisis stress of the injury and then disappear again, but rather *remained* accessible to his conscious mind. With extensive therapy, the memories lost their obsessive, intrusive, Post Traumatic Stress Disorder (PTSD) quality, but he was still able to recall the details of the murder if he chose to do so.

with recollections of childhood sexual abuse, he was suddenly overwhelmed with vivid memories of his own abuse. Strong corroboration was obtained to support the accuracy of his recovered memories, in that the *perpetrator* then *acknowledged* the abuse.

Van der Kolk, BA, & Fisler, R. "Dissociation and the fragmentary nature of traumatic memories: Overview and exploratory study." *Journal of Traumatic Stress.* 1995 October; 8(4), 505-525.

In depth interviews were obtained from 46 adults with Post Traumatic Stress Disorder (PTSD). Of the 36 with childhood trauma, 42% suffered significant or total amnesia at some time. Corroborating evidence supporting the historical truth of the childhood trauma was available for 75%.

Viederman M. "The reconstruction of a repressed sexual molestation fifty years later." *Journal of the American Psychoanalytic Association*. 1995; 43(4): 1169-95.

The patient in this case study recovers memories of sexual abuse that had previously been completely repressed, and then also obtains corroboration (six years following termination of therapy the patient wrote a letter describing confirmation of the event from another person who had knowledge of what had happened).

Williams LM. "Recall of Childhood Trauma: A Prospective Study of Women's Memories of Child Sexual Abuse," *Journal of Consulting and Clinical Psychology*. 1994, Vol. 62, No. 6, pages 1167-1176; Williams LM. "What Does it Meant to Forget Child Sexual Abuse? A Reply to Loftus, Garry, and Feldman (1994)," *Journal of Consulting and Clinical Psychology*, 1994, Vol. 62, No. 6, pages 1182-1186; and Williams LM. "Recovered memories of abuse in women with documented child sexual victimization histories." *Journal of Traumatic Stress*. 1995 October; Vol. 8, No. 4, pages 649-73.

129 women with histories of childhood sexual abuse documented at the time of the trauma were interviewed 17 years after the initial report and asked detailed questions about their abuse histories. 80 (62%) of the women recalled the abuse, 49 (38%) did not remember the specific incident that precipitated the documented hospital admission or any other incidents of abuse by the same perpetrator, but did report other abuse, and 16 (12%) of the women did not appear to have any memory of being abused. Thirteen of the women who recalled the abuse at the time of the interview reported that at some time in the past they had forgotten about the abuse. Williams specifically notes that the women with a prior period during which they had no conscious memory of the abuse – the women with "recovered memories" – did *not* recover the memories in therapy, or use special techniques (such as hypnosis) to search for them. Most of these women stated that they did not forget the abuse until years later, but two clearly and explicitly described forgetting each episode of abuse immediately after it occurred. The women who had recovered memories and those who had always remembered had the same number of discrepancies when their accounts of the abuse were compared to the reports from the early 1970s.

Yovell, Y. et al. "Amnesia for Traumatic Events Among Recent Survivors: A Pilot Study" *CNS Spectrums*, September 2003 (Vol 8, #9) pp 676-685.

Yoram Yovell, MD, PhD, and his colleagues have recently published a study that is especially significant because the evaluation of memory was carried out *very quickly after the traumatic*

events occurred,¹⁸ information from other sources regarding details of the events was also gathered shortly after the traumatic events occurred,¹⁹ and the completeness and accuracy of recall was evaluated in long and detailed interviews that systematically probed for memory gaps. Instead of asking more general questions about amnesia, such as "Do you remember the traumatic event?" or "Are there any parts of the traumatic events that you don't remember?" the interviewers asked the subjects to describe the events in detail, and then systematically probed for memory gaps. This systematic probing was especially effective because the interviewers used the information from other sources to guide their systematic questions. Since the evaluation interviews were conducted so quickly after the incident, psychogenic amnesia for traumatic details did not get mistaken for other "normal" forgetting processes – both the interviewers and the subjects expected that all the important details of the event would be remembered, and were therefore much more likely to recognize psychogenic memory gaps, as opposed to mistaking significant amnesia for "normal" forgetting processes that might be expected in the studies that don't assess for psychogenic memory gaps until years after the traumatic events.

Dr. Yovell and his colleagues observe several very significant results:

All of the six subjects had some memory of the traumatic events (none of them demonstrated complete amnesia).

For details of moderate, or even severe emotional intensity, the subjects displayed the well documented pattern of *increased memory* detail and accuracy for events that were more emotionally intense.

However, amnesic memory gaps were observed under conditions of *extreme* stress (such as the moment of impact in an automobile accident), or for details that were *extremely* upsetting (such as the moment of seeing the dead body of the person in the other car). *Every one of the four subjects* that participated in the 1 week assessment interview demonstrated clearly delineated, complete amnesia for certain especially emotionally intense details of the traumatic events, and *all of the subjects* displayed this same pattern of clearly delineated, complete amnesia for certain especially intense details at both the 30 day and 120 day interviews.

Most of the subjects were initially unaware of their memory gaps, and, in fact, specifically denied memory loss for any part of the traumatic events when questioned about this as part of the psychological evaluation at the beginning of the study. Most of the subjects did not perceive their amnesia until the interviewers systematically probed for possible memory gaps. NOTE that studies asking more general questions instead of systematic probing, and/or studies performed after a longer delay, probably would have missed the psychogenic amnesia

¹⁸ All other research and case studies that I am aware of don't evaluate amnesia for traumatic events until years after the actual events. However, this study was set up so that subjects could be recruited in the emergency room, only hours after the trauma occurred, and the interviews to assess completeness and detail of memory were then performed 1 week, 30 days, and 120 days after the traumatic events.

¹⁹ Additional information regarding details of the traumatic events was gathered from ambulance reports, emergency room medical reports, emergency room psychological evaluations, and eye witness reports from others present at the scene of the trauma.

in these subjects.

The following excerpt provides an example of the clearly defined memory gaps that were observed to cut out the most intense moments of traumatic events (from one subject's description of a fight with his father):

"I wanted to avoid any further violence, so I told him I was leaving. I went to my room to get my bag and he followed me, screaming. I don't remember how I got from the living room to my room. But when I got there I turned around and saw that he was holding a knife. He looked stunned. I raised my hands to protect myself and it was then that I felt a stream of blood coming from under my armpit. He must have stabbed me when I was on my way from the living room to my room, but I can't remember it happening." pg 679.

III. Summary

My assessment at this time is that careful examination of the whole body of evidence indicates misattribution and suggestibility are real phenomena, and that it *is* possible to cause memory errors if one uses imagination/guided imagery recovery tools, makes suggestive comments, and asks suggestive questions. People also distort memory spontaneously in order to downgrade painful implications. All of this is why it is *so* important to *not* suggest specific details regarding traumatic events and to *not* use imagination/guided imagery tools to "search" for traumatic memories. This is also why it is *so* important to be cautious about making specific accusations on the basis of remembered traumatic events. Focus on cooperating with Jesus to resolve the truth-based pain, lies, sins, and demonic infections associated with the traumatic memories. When the person receiving healing has reached the perfect peace of Christ in all of her traumatic memories, then she should ask Jesus whether or not she should take any action based on what she has remembered. She (or he) should also bear in mind the risks involved in making accusations. The ideal situation would include having clear corroborating evidence verifying the identity of the perpetrators.

However, showing that memory errors are real and that it is possible to create memory errors is very different than proving that repressed and dissociated memories don't exist or that many/most/all recovered memories are misattribution errors. Careful examination of the whole body of evidence indicates that repressed and dissociated memories are real phenomena, and that most "recovered" traumatic memories have a core of historical truth (with common small memory errors regarding details).