Brain Science, Psychological Trauma, and the God Who Is with Us, Part III: **Traumatic Memories vs Non-Traumatic Memories**

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I. Introduction: As described in the presentations on the pain processing pathway, we all encounter painful experiences. When we encounter pain, our brain-mind-spirit system tries to process the painful experience, and there is a specific pathway that this processing follows. When we are able to successfully complete this processing journey, we get through the painful experience without being traumatized - we emotionally and cognitively "metabolize" the experience in a healthy way, and instead of having any toxic power in our lives, the adequately processed painful experience contributes to our knowledge, skills, empathy, wisdom, and maturity. As also described in the discussion of the pain processing pathway, various problems and/or limitations can block successful processing; and if we are not able to complete the processing journey then the painful experience becomes a traumatic experience, and the memories of these traumatic experiences have toxic power in our lives.

As we work to resolve the toxic memories of traumatic experiences, it is helpful to understand the ways in which traumatic memories are different from non-traumatic memories.

II. Memories for different kinds of content display qualitative differences: One of the most fascinating observations regarding memory phenomena is that memories for different kinds of content display qualitative differences – they feel subjectively different and behave differently in ways that are consistent and important.

Feel subjectively different: Using memories for one kind of content *feels subjectively* different than using memories for other kinds of content. For example, when I engage in physical activities, such as walking or riding a bicycle, I am not consciously aware of using memories. I just walk or ride, without even considering that the ability to walk or ride a bicycle is a learned skill, and that I am using motor skill memory files every time I engage in the activity. This *feels subjectively different* than the experience of using memory files for factual information. When I recall factual information, such as the address of a friend I have not visited for years, it *feels, subjectively*, like I search for and then find a piece of information that is stored in a filing system. And using either of these two types of memory files *feels subjectively different* than using memory files for autobiographical information. When I use a non-traumatic autobiographical memory file, I am consciously aware of remembering an event from my personal past experience, and this autobiographical remembering process *feels*, *subjectively*, like replaying a faded, less intense version of the original experience.

Behave differently: Memories for one kind of content also behave differently than memories for other kinds of content. One of the most important ways in which memories for different kinds of content behave differently has to do with how easily the content can be modified. For example, it is easy to modify the memory file that contains information about our plans for the upcoming weekend. If we had been planning to spend Sunday afternoon in an extended meeting to review the church budget, but then this gets cancelled and Charlotte suggests going to the botanical gardens instead, it is very easy for me to remember that on Sunday afternoon I will be watching birds at the botanical garden instead of reviewing pages of financial records

and calculations.

However, memory files carrying certain other kinds of content can be very difficult to modify. My relationship with fried mushrooms provides an excellent illustration of this point. Most of my childhood I loved fried mushrooms. When we would visit my grandparents in Pennsylvania grandpa would occasionally find a few puffballs (mushrooms that are especially easy to identify and absolutely safe to eat). Grandma would slice them into sections and fry them in butter, and my only negative reaction was to be disappointed that each of us only got a small portion. Then one summer we had fried mushrooms on the same day that I came down with the intestinal flu, so that I experienced miserable nausea and vomiting immediately after eating fried mushrooms.¹ For almost 10 years after this experience, not only did I no longer "like" fried mushrooms, but I would actually get nauseated if I smelled them cooking. Then for another 10-15 years I just didn't like them. It took almost 30 years of desensitization before I enjoyed eating fried mushrooms again. Even though I knew that I had always loved them before, that there was nothing wrong with them, and that my aversion was caused by an accidental association with stomach upset from the flu – even in spite of all this opposing information it took 30 years to desensitize the unconscious, involuntary reaction I "learned" from getting sick after eating mushrooms.

III. Traumatic memories and non-traumatic memories are *qualitatively* **different:** We can observe this same kind of *qualitative* difference when we compare traumatic and non-traumatic memories. Research studies, case studies, and observations from our own lives all reveal that traumatic memories and non-traumatic memories *feel subjectively different* and *behave differently* in ways that are consistent and important, indicating that memories for traumatic experiences and memories for non-traumatic experiences are processed, stored, and retrieved differently.

A. Feel subjectively different: Activating traumatic memories feels subjectively different than activating non-traumatic memories. "Flashbacks" from dissociated traumatic experiences provide an especially dramatic example. I have worked with many combat veterans who experienced flashbacks as part of their post traumatic stress disorder (PTSD), and these veterans always described flashbacks as feeling like *reliving* the original traumatic experiences, as opposed to feeling like normal autobiographical remembering. These veterans reported that when they were inside flashback experiences they would see the enemy soldiers, the maimed bodies of their dead comrades, and other images from their combat memories as vividly as when they were actually there; they would *hear* the screams, gunfire, explosions, and other sounds of battle as clearly as if they were listening to the sound track from a combat movie; they would *feel* the weather conditions, the weight of the friends they were carrying in their arms, the pain from wounds, and other physical sensations as distinctly as if these things were actually occurring in the present; they would *smell* the smoke from gunfire, the stench of burning flesh, and other odors from the battlefield as if these things were actually present in my office; and they would perceive the thoughts and experience the emotions from their memories as vividly and intensely as in the original combat experience. Again, people accessing flashback traumatic memories report that it feels like reliving the original event.

In addition to my own observations, many other clinicians and researchers working with

¹ For those of you wondering about the mushrooms, I know they did not cause my illness because everybody else had them but nobody else got sick.

traumatic memory have carefully studied and described the ways in which traumatic flashbacks are subjectively different than normal autobiographical memory,² and there are many published case studies that include detailed descriptions of this phenomena.³

Another dramatic example is provided by traumatic experiences that do not get routed to the alternative processing pathway, but that are sufficiently intense to severely impair or completely disable the hippocampus. When the hippocampus is *severely impaired* it does a poor job of mapping how the different components of the experience fit together, so that when the memory is activated the different components of the experience come forward in a disorganized jumble instead of being coordinated into a coherent autobiographical story. If you ask the person to describe the traumatic event, he will have trouble remembering how the visual images, auditory memories, cognitions, and emotions all fit together, and will tell a story that is disorganized and confusing.⁴

When the hippocampus is *completely disabled* there is *no* mapping between the different components. Traumatic experiences during early childhood provide one of the clearest examples of this phenomena because the combination of a neurologically immature hippocampus and the cortisol-mediated interference associated with traumatic stress frequently result in memories that are processed without any contribution from the hippocampus. Because there is *no* mapping between the different components these memories do not even come forward as disorganized autobiographical memory packages. When triggering stimuli that match some aspect of the original experience activate these memories the different components (visual images, memory for sound track, memory for other sensory components, distorted interpretations, painful emotions) come forward as completely separate, disjointed pieces.

While Flashbacks and hippocampus-impaired memories for severe trauma are especially dramatic, remembering even minor traumatic events still *feels subjectively different* than remembering non-traumatic events. For example, when I was in second grade I had a bathroom accident that I experienced as painfully shameful. Whenever someone asked to go to the bathroom, my teacher would make angry comments about the kids that used the bathroom pass to run around the halls. I was so afraid of being the target of my teacher's angry disapproval

² See, for example Van der Kolk, Bessel A.; & Fisler, Rita. "Dissociation and the fragmentary nature of traumatic memories: Overview and exploratory study." *Journal of Traumatic Stress*. October 1995, Vol. 8, No. 4, pages 505-525; and van der Kolk, Bessel A., "Trauma and Memory," chapter 12 in Van der Kolk, Bessel A; McFarlane, Alexander C; Weisaeth, Lars, Editors. *Traumatic Stress: The Effects of Overwhelming Experience on Mind, Body, and Society*. (New York: Guilford Press) 1996, pages 279-302.

³ See, for example, Shapiro, Francine & Silk Forrest, Margot. *EMDR: The Breakthrough Therapy for Overcoming Anxiety, Stress, and Trauma* (HarperCollins: New York, NY), 1997. The case studies discussed on pages 1-4, 74-88, 136-147, 171-175, and 192-200 include detailed descriptions of this "reliving" type memory experience.

⁴ This phenomena of disjointed implicit memory fragments is also discussed in Van der Kolk, Bessel A., & Fisler, Rita. "Dissociation and the fragmentary nature of traumatic memories: Overview and exploratory study." *Journal of Traumatic Stress.* October 1995, Vol. 8, No. 4, pages 505-525; and van der Kolk, Bessel A., "Trauma and Memory," chapter 12 in Van der Kolk, Bessel A, McFarlane, Alexander C, Weisaeth, Lars, Editors. *Traumatic Stress: The Effects of Overwhelming Experience on Mind, Body, and Society.* (New York: Guilford Press) 1996, pages 279-302 (see especially the discussion on pages 287-289).

that I never asked to go to the bathroom. This was not usually a big problem, but then one day I had diarrhea. I waited until I felt like I was going to explode, and then hurried to the front desk, asked for the bathroom pass, and raced to the bathroom. I almost made it - I got to the bathroom and into a stall before having a messy accident in my pants and on the floor. To make things worse, several older kids came into the bathroom while I was cleaning up the mess, and from their facial expressions and comments it was clear that they thought I was a pathetic loser.

Even though this was not severe trauma, such as being in a car wreck where family members were killed, it was still a traumatic event because I was not able to successfully complete processing tasks at levels three, four, or five. With respect to level three, I was not able to maintain access to my relational connection circuits, and therefore had the subjective perception of being totally isolated in this experience. I could not perceive the Lord's presence with me or feel the internalized presence of other's that loved me, and instead of reaching out to my parents after the event so they could help me I secretly washed my soiled clothes and didn't tell anyone about what had happened. With respect to level four, I had no idea how to handle the situation, and felt inadequate and stupid because of this. With respect to level five, my interpretation of the meaning of the experience was: "Only babies poop in their pants. I'm weak, stupid, incompetent, and undesirable because I pooped in my pants," and this distorted interpretation produced intense left-sided shame. In fact, I felt so much shame about this incident that I never told anybody about it until more than thirty years later when this memory came up in an emotional healing session.

My hippocampus was functioning well enough that the different components, such as memory for the visual images, memory for what the other kids said, memory for my distorted cognitions, and memory for the associated painful emotions were all organized into an autobiographical story. And my hippocampus was functioning well enough to perform it's librarian function – if the subject of embarrassing experiences came up, my conscious, voluntary search function could quickly and easily find the autobiographical memory package for this experience. However, during the many years that I carried this experience as an unresolved traumatic memory, accessing this traumatic autobiographical story always *felt subjectively different* than accessing non-traumatic autobiographical events. Whenever I would recall this event I could feel toxic energy as soon as the memory was activated, I would experience subjective distress, and the unresolved content *would feel true in the present*.

When I thought about the overall autobiographical storyline, the visual imagery, and what the other kids said, these would all feel like normal memory – like I was remembering a past event. However, the *unresolved content* – the perception of being isolated in the experience, the sense of not knowing how to handle the situation, the feeling of inadequacy, the distorted interpretations, and the associated shame – *would always feel true in the present*. I realized that they were associated with the second grade bathroom memory, but they also still felt true in the present.

In contrast to the *traumatic* memory examples just discussed, when I use a *non-traumatic* autobiographical memory file I am consciously aware of remembering an event from my personal past experience, and this autobiographical remembering process *feels*, *subjectively*, like replaying a faded, less intense version of the original experience. When I use a non-traumatic autobiographical memory file the memory content does *not* feel like it's true in the present, I do *not* feel distress, and I am *not* impaired by unresolved toxic content.

B. Behave differently: Memories for traumatic events *behave differently* than memories for non-traumatic events.

1.) Ease of modification: One of the most important ways in which memories for traumatic events behave differently than memories for non-traumatic events has to do with how easily the content can be modified. One of the best examples is the difference between beliefs that are carried in non-traumatic memories and beliefs that are carried in memories for unresolved trauma. As described above, it's easy to modify the memory file that contains information about our plans for the upcoming weekend. If we had been planning to spend Sunday afternoon reviewing the church budget, but then this gets cancelled and Charlotte suggests visiting the botanical gardens instead, it is very easy for me to remember that on Sunday afternoon I will be watching birds at the botanical gardens instead of attending a budget review meeting. Or consider e-mail addresses. I currently believe that my e-mail address is drkarl@kclehman.com. However, what happens if Charlotte says: "I have some bad news. We forgot to pay the yearly fee to retain our registration of the kclehman.com domain name, and now somebody else has taken it. I therefore had to change our website address and our email addresses. Our new website address is absentminded.com, and your new e-mail address is now drkarl@absentminded.com"? In response to this simple piece of information, I promptly change my belief regarding my e-mail address.

And this ease of modification does not only apply to simple pieces of information, such as my e-mail address or our social calendar for the weekend. Those studying education and general memory functions have carried out lots of research regarding the modification of knowledge/beliefs under basically normal conditions, which I perceive to be the same thing as the modification of beliefs that are based on non-traumatic memories. These studies verify that, when working with non-traumatic beliefs, it is fairly straight-forward to modify even long-standing, deeply held beliefs. The researchers discovered that it is very important to identify the misinterpreted data and/or mistaken logic that support the erroneous beliefs, and then lead from the erroneous beliefs to the correct beliefs with data and logic that the person perceives as valid; but when these reasonable conditions are met the average camper will easily correct mistaken beliefs associated with non-traumatic memories.⁵

For example, people form deeply held beliefs about the physical world based on personal observations, such as the belief that the world is flat based on the obvious and simple observation that you can *see* that it is flat (take a moment to look out the nearest window – doesn't the world look flat to you?). However, when explorers demonstrated that you could sail around the world without falling off, principles of geometry and calculus were employed to show how the curving surface of a VERY LARGE object will *appear* to be flat, and

⁵ For additional discussion of these principles of conceptual change for non-traumatic beliefs, and discussion of the research supporting them, see Bransford, John D., Brown, Ann L., Cocking, Rodney R., Donovan, Suzanne M., Pellegrino, James W. (Eds.) *How People Learn: Brain, Mind, Experience, and School (Expanded Edition)*. (Washington, D.C.: National Academy Press) 2000, pages 179-182; Clement, J. "Using bridging analogies and anchoring intuitions to deal with students' preconceptions in physics." *Journal of Research in Science Teaching,* "1993, Vol. 30, No. 10, pages 1241-1257; Mestre, J.P. "Cognitive aspects of learning and teaching science," chapter 3 in *Teacher Enhancement for Elementary and Secondary Science and Mathematics: Status, Issues, and Problems,* S.J. Fitzsimmons and L.C. Kerpelman (Eds.), (Arlington, VA: National Science Foundation) 1994, pages 3-6 to 3-36; and Sokoloff, D.R., and Thornton, R.K. "Using interactive lecture demonstrations to create an active learning environment." *The Physics Teacher*, September 1997, Vol. 35, No. 6, pages 340-347.

scientists clarified that gravitational pull from the massive earth keeps us on the surface,⁶ *beliefs changed*. Everybody who carefully considered this compelling combination of data and logic changed their longstanding, deeply held beliefs regarding the world being flat.

In dramatic contrast to knowledge/beliefs associated with *non-traumatic* memories, it is very difficult to modify beliefs that are a part of *traumatic* memories. Opposing information carried in non-traumatic memories can *compete with* the trauma-associated beliefs, *but in most situations this challenging information is not able to permanently resolve or correct distorted interpretations carried as part of memories for unresolved traumatic events.*

My experience with feeling stupid provides an excellent example. I have dyslexia, but this was not discovered until second grade. Unfortunately, this meant that my teachers did not understand the problem or know how to help me during kindergarten and first grade as I was having tremendous difficulty learning how to read. There were incidents of particular unpleasantness, like getting laughed at by the whole class while trying to do some kind of reading/writing exercise on the chalkboard, but mostly it was the day after day after day experience of being unable to learn how to read. Eventually, I came to the following conclusion: "If all the other kids in the class are solving the problem without apparent difficulty, and I try all day every day for a year, with no results but frustration and failure, then there must be something wrong with my brain." Even though I was too dumb to learn how to read, at least I was smart enough to figure out that I was stupid.⁷

The point pertaining to our discussion regarding traumatic memories is how difficult it has been to modify this belief that I was stupid.

In sixth grade I discovered that I could get "A's" if I worked hard enough, and academic success became an important part of my strategy for coping with fears and insecurities. I got A's in every class for the remainder of my junior high career, and finished as the top academic student on my team of 125 kids. But underneath it all, I still believed I was stupid. I got A's in almost every class throughout my entire high-school career, qualified for 24 hours of Advanced Placement college credit, and graduated in the top 1% of my class with multiple academic awards, including a national merit scholarship and the number one academic scholarship at the college I was going to attend. But I still believed I was stupid. I got A's in almost every class throughout my entire college career, completed majors in biology, chemistry, and physics, graduated magna-cum-lauda, and was inducted into the honors society. But it still *felt* true that I was stupid. When I decided to go into medicine, I scored in the 99th percentile on the Medical College Admission Tests and competed against 200 other medical students to obtain one of only three academic scholarships at the University of Kansas School of medicine. I got A's in almost every class throughout my entire medical school career, scored in the 99th percentile on the national board exams, and graduated as the vice president of the medical honors society. But I still knew that I was stupid. At the end of my psychiatric specialty training I obtained the highest score of anybody in our program when we took the standardized test designed to evaluate psychiatric knowledge, and I was

⁶ Are you *really sure* this applies to people who live in Australia, where everything is upside down and you would think they would need to cling to the surface to avoid falling into space?

⁷ Several other strategic traumatic memories, such as the incident described in the essay "I'm too stupid," also contributed to my deeply held belief that I was stupid.

chosen by the faculty to receive the top academic honor. But in my heart of hearts, I was still convinced that I was stupid.

There were also specific incidents that indicated I might not be stupid after all. For example, there was an incident in sixth grade where one of the smart eighth graders was showing me an especially difficult problem towards the end of the eighth grade math book. He was pointing out the impressive difficulty of the material he was working on, but admitted that he had not yet been able to figure out this particular problem. I looked at the problem for a few moments, and to my great surprise realized that I understood the point he was unable to grasp.

However, in spite of all this evidence to the contrary I was still convinced that somehow I was stupid. I truly believed that my IQ was barely average. I would argue with friends and family about why none of my academic accomplishments could prove that I was intelligent – I would explain how I worked much harder than other people at the same tasks, and that it was this diligence in putting in extra time and energy, rather than a high I.Q., that accounted for all my achievements. And I can remember being puzzled by the specific incidents that especially challenged my belief that I was stupid. For example, some time after the incident with the eighth grader and his math book I remember pausing and thinking: "That's something that a smart person would do – how strange. I wonder how that happened." I could never make sense out of these contradictory data points, and so eventually just dismissed them as some kind of artifact.

This scenario led to chronic anxiety and insecurity, since much of my identity had come to be organized around my academic success but underneath it all I still felt stupid. Even after all my academic success, I clearly remember being afraid to have my IQ tested, for fear that the test results would reveal the terrible truth that I was actually stupid. I felt that somehow I had managed to appear intelligent even though I knew I wasn't. I had fooled people (unintentionally) into thinking I was smart, but certainly they would eventually discover this was not true. I even felt that my scores on the SAT and other standardized tests weren't "real" – almost that I must have cheated somehow, or that my scores were an "accident." On the many occasions that I felt insecure I would present to myself all the evidence indicating that I was actually intelligent. However, this large pile of evidence would *compete with* the "I'm stupid" belief, but the information in these non-traumatic memories for unresolved traumatic events. I could use these cognitive therapy techniques to *temporarily manage* my anxiety and insecurity, but the distorted belief anchored in underlying traumatic memories was never *permanently resolved*.

Additional evidence: In addition to observations regarding trauma-associated beliefs in ourselves and our personal acquaintances, and observations from working with people in the context of therapy/emotional healing ministry, there is also a large body of published case studies and a growing body of research that specifically address the modification of beliefs that have been formed by misinterpreting the meaning of traumatic events. See, for example, the case studies and discussion of trauma associated negative cognitions in publications regarding EMDR,⁸ the case studies and discussion of trauma-associated "lies" included in Dr.

⁸ See, for example, the many case studies described in Parnell, Laurel. *Transforming Trauma: EMDR*, (New York, NY: W.W. Norton & Company) 1997; Shapiro, Francine. *Eye Movement*

Ed Smith's Theophostic® material,⁹ the discussion of trauma-associated negative cognitions included in publications on cognitive therapy for Post Traumatic Stress Disorder,¹⁰ and the discussion of trauma-associated negative cognitions included in general discussions of psychological trauma. All of these sources clearly describe how trauma-associated beliefs are resistant to change, even in the face of clear data opposing them, and how special conditions are required for correction of these persistent traumatic memory beliefs.¹¹

An especially helpful analogy – files and windows on your personal computer: When thinking about the difference with respect to ease of modification between beliefs that are based on non-traumatic memories and beliefs that are carried as parts of memories for unresolved trauma, we have found the behavior of files and windows on your personal computer to be an especially helpful analogy.

When you open a non-traumatic memory file, and then present new information to correct an erroneous belief, it's as if you can easily work in the same window and use the new information to permanently modify the original file. Whenever this file is opened in the future it will contain the new, updated, correct information. However, *in most situations*, when you open a *traumatic* memory file it will open in *"read only"* status. You can present opposing information from non-traumatic memories by opening other files in additional windows, but you can't work in the same window to permanently correct the error in the original traumatic memory file. The new information can *compete* with the distorted beliefs associated with unresolved trauma, and this will *moderate or manage* the distorted beliefs and associated emotions, *but the original file will not be permanently corrected*. In the future,

⁹ Smith, Ed. *Genuine Recovery*. (Campbellsville, KY: Alathia Publishing), 2000; Smith, Ed. *Healing Life's Deepest Hurts*. (Co-published: Ann Arbor, MI: Servant, Campbellsville, KY: New Creation) 2002; and Smith, Ed. *Theophostic® Prayer Ministry: Basic Seminar Manual*, (Campbellsville, KY: New Creation Publishing), 2005.

¹⁰ Foa, Edna B., Steketee, Gail, & Rothbaum, Barbara Olasov, "Behavioral/Cognitive conceptualizations of Post-Traumatic Stress Disorder." *Behavior Therapy*, 1989, Vol. 20, pages 155-176; Rothbaum, Barbara Olasov, and Foa, Edna B. "Cognitive-Behavioral therapy for Post Traumatic Stress Disorder," Chapter 22 (pages 491-509) in Van der Kolk, Bessel A, McFarlane, Alexander C, Weisaeth, Lars, Editors. *Traumatic Stress: The Effects of Overwhelming Experience on Mind, Body, and Society.* (New York: Guilford Press) 1996.

¹¹ Note: When thinking about the data regarding ease of modification, it is important to realize that beliefs can also be *indirectly* associated with traumatic memories, and that this presents an intermediate condition. That is, trying to change a belief can feel emotionally threatening because the belief is incorporated into our coping system in some way, and trying to change it triggers unresolved trauma. When this is the case the person will resist changing the belief, even though the belief is not a misinterpretation of the meaning of a traumatic event, and therefore not *directly* anchored in unresolved trauma.

Desensitization and Reprocessing: Basic Principles, Protocols, and Procedures. (New York, NY: Guilford Press) 1995; Shapiro, Francine, & Maxfield, Louise. "EMDR and Information Processing in Psychotherapy Treatment: Personal Development and Global Implications." In Solomon, Marion F., & Siegel, Daniel J. (Eds.), Healing Trauma: Attachment, Mind, Body, and Brain. (New York, NY: W.W. Norton & Co.), 2003, pages 196-220; and Shapiro, Francine & Silk Forrest, Margot. *EMDR: The Break-through Therapy for Overcoming Anxiety, Stress, and Trauma* (HarperCollins: New York, NY), 1997. These sources also reference many additional case studies published in professional journals, such as Brown, K.W., McGoldrick, T., & Buchanan, R. "Body dysmorphic disorder: Seven cases treated with eye movement desensitization and reprocessing." *Behavioral & Cognitive Psychotherapy*, 1997, Vol. 25, pages 203-207.

every time the traumatic memory file is activated, the distorted beliefs and associated emotions will still be there, and you will have to repeat the process of trying to moderate or manage the problem by opening other, separate files that carry truth that challenges the distorted beliefs.

For example, my knowledge regarding medication dosages is mostly carried in non-traumatic memories. If I believe that 12.5mg/day is the appropriate dosage of Controlled Release Paxil for the treatment of panic disorder, but then I come across a new, carefully documented study that shows 25mg/day is actually more effective for most patients, the new information will permanently modify my original beliefs about Paxil dosages. In the future, when questions about Paxil dosages for panic disorder come up, the new, correct information will come forward. There won't need to be a fight, every time the question comes up, between a persistent erroneous file and the newer, more accurate information.

In contrast to information about Paxil dosages carried in non-traumatic memories, my distorted beliefs about my intelligence were anchored in memories for unresolved trauma. The material carried in these traumatic memory files included the belief that I was stupid. Even though other evidence accumulated that challenged this belief, this opposing evidence was carried in separate non-traumatic memory files. This opposing evidence could *challenge* and *compete with* my distorted beliefs, but it was never able to get into the traumatic memory files in order to *permanently correct* my conviction that I was stupid. In spite of all the evidence to the contrary, every time the distorted interpretations component of my dyslexia trauma would get activated by some trigger, my "I'm stupid" belief files would come forward and "I'm stupid" would *feel true*.

When you *are not* triggered your traumatic memory files are dormant, and their windows are closed; whereas non-traumatic memory files are active, and their windows are open. When you *are not* triggered non-traumatic memory windows dominate the screen, and beliefs carried in non-traumatic memories *feel true* and *govern your reality*. On the other hand, when you *are* triggered traumatic memory files are activated, and their windows open in front of the non-traumatic memory files. When you *are* triggered windows from beliefs carried in traumatic memory files. When you *are* triggered, traumatic memory beliefs *feel true* and *govern your reality*.

We have just discussed distorted interpretations at level 5 as an especially good example of traumatic content that is difficult to modify. This same difficulty with respect to modification also applies to the other components of unresolved content carried in traumatic memories. For example, if you have raw perceptual content that was dissociated by disconnection at level 2 before any processing occurred, and this content comes forward as physical memories, you can *manage* the problem by reminding yourself that the physical symptoms you are experiencing are actually implicit memory content, since they are exactly the same physical symptoms that have been carefully evaluated with the conclusion that there is no medical cause in the present, and since they exactly match known traumatic memories; *but this helpful information carried in non-traumatic memory files will not permanently resolve the toxic content in the underlying traumatic memories*. You can also prepare for healing by building your capacity to stay with painful emotions, *but this increased capacity, by itself, will not permanently resolve the toxic content in the underlying traumatic memories*.

If your unresolved traumatic memories include intense emotions where you lost the relational

aspect of yourself, and this content gets triggered forward, you can *manage* the problem by remembering Biblical principles and reminding yourself that you are committed to considerate behavior, even when you do not *feel* any *subjective* relational concern; but this helpful information carried in non-traumatic memory files, by itself, will **not** permanently resolve the toxic content in the underlying traumatic memories. You can also prepare for healing by building your level 3 maturity skills and by strengthening your voluntary capacity, but these additional maturity skill and capacity resources, by themselves, will **not** permanently resolve the toxic content in the underlying traumatic memories.

If you have memories of traumatic experiences where you were unable to complete the level 4 task of finding a satisfying way to navigate the situation, you can prepare for healing by building your maturity skills and your voluntary capacity – you can find and practice responses you might use if confronted with a situation similar to the traumatic event, and you can engage in activities to strengthen your capacity; but these additional maturity skill and capacity resources, by themselves, will not permanently resolve the toxic content in the underlying traumatic memories. If these traumatic memories are triggered forward, including the unresolved level 4 content of not knowing what to do and feeling inadequate, you can *manage* the problem by remembering Biblical principles and reminding yourself of the solutions you figured out while non-triggered; but this helpful information carried in non-traumatic memory files, by itself, will **not** permanently resolve the toxic content in the underlying traumatic memories.

If you have memories of traumatic experiences where you were unable to complete the level 5 task of making sense out of the situation, you can prepare for healing by building your maturity skills and your voluntary capacity – you can work to understand the meaning of the traumatic events with respect to your self and you can deliberately engage in activities to strengthen your capacity – but these additional maturity skill and capacity resources, by themselves, will not permanently resolve the toxic content in the underlying traumatic memories. If these traumatic memories are triggered forward, including the unresolved level 5 content of confusion, you can *manage* the problem by remembering Biblical principles and reminding yourself of the understanding you figured out while non-triggered; but this helpful information carried in non-traumatic memory files, by itself, will **not** permanently resolve the toxic content in the underlying traumatic memory files, by itself, will **not** permanently resolve the toxic content in the underlying traumatic memory files, by itself, will **not** permanently resolve the toxic content in the underlying traumatic memory files.

As will be discussed in Part IV, the unresolved content carried in traumatic memories can only be modified under certain conditions. Increased capacity and new maturity skills *can contribute to permanent healing*, but you cannot *directly* resolve traumatic memory content by simply building capacity and loading more maturity skills into non-traumatic memory files. And informational truth carried in non-traumatic memories *can contribute to permanent healing*, but you cannot *directly* resolve traumatic memory content by simply loading more truth into non-traumatic memory files.¹²

2.) Ease of access: Another important way in which memories for traumatic events behave differently than memories for non-traumatic events has to do with how easily the memories can be accessed. Traumatic experiences that overwhelm the person's involuntary capacity

¹² See "Brain Science, Emotional Trauma, & The God Who is With Us, Part VI: Special Topics" for discussion of how truth carried in non-traumatic memories can contribute to permanent resolution of traumatic memory content.

and are therefore shunted to the alternative processing pathway provide the clearest example. These dissociated memories are completely unavailable to the person's conscious awareness under normal circumstances – they cannot be accessed by the conscious voluntary strategic search system, and they cannot be accessed by association network stimulation. Dissociated memories can only be accessed under certain very specific conditions.¹³

Traumatic experiences that are not dissociated, but that are sufficiently intense to seriously impair the hippocampus provide another example of traumatic memories being difficult to access. This is especially clear for traumatic experiences during early childhood, where the combination of a neurologically immature hippocampus and the cortisol-mediated interference associated with traumatic stress frequently result in memories that are processed without any contribution from the hippocampus.¹⁴ Because the disabled hippocampus does not perform any librarian functions for these memories, they cannot be accessed by the conscious voluntary strategic search system. Other than in the context of guidance from Jesus, these memories are only accessed when triggering stimuli that match some aspect of the original experience activate one or more of the disjointed components through association network stimulation.

IV. What causes the qualitative differences between traumatic and non-traumatic memories?:

A. Multiple parallel memory systems: The more carefully we study the mind and brain, the more complexity we discover with respect to memory.

One of the most important developments in memory research in recent decades has been the discovery of a number of parallel memory systems. These parallel memory systems are *qualitatively* different, and can operate independently.¹⁵

Neurological injury case studies: There is a LOT of evidence demonstrating the reality of these different memory systems.¹⁶ Some of the most easily understood data proving the existence of these parallel memory systems are observations from medical situations where a particular neurological injury affects the different memory systems in different ways. If there is only a single memory system that handles all of the different types of memory, then injury to this

¹⁵ For a brief summary of the progressive discovery of multiple memory systems over the last five decades, see page 1111 of Jacobs, W.Jake, & Nadel, Lynn. "Neurobiology of reconstructed memory," *Psychology, Public Policy, and Law.* 1998, Vol. 4, No. 4, pages 1110-1134.

¹³ For example, several specific conditions for accessing dissociated memories are: 1) triggering stimuli that match some aspect of the original experience activate the memory through association stimulation, and this activation is powerful enough to temporarily overcome the dissociative barriers; 2) some change in other variables causes internal parts to allow dissociated memories into conscious awareness; 3) specific conditions in hypnotic sessions designed to access dissociated memories.

¹⁴ Non-dissociated early traumatic memories are possibly the best example of memories that are processed with the hippocampus totally off line.

¹⁶ For a discussion of the many bodies of evidence supporting the existence of multiple memory systems, see Squire, L.R., "Declarative and non-declarative memory: Multiple brain systems supporting learning and memory," In D.L. Schacter, & E. Tulving (Eds.), *Memory Systems* (Cambridge, MA: MIT Press), 1994, pages 203-231.

single memory system should impair all the different types of memory in the same way. However, there are many carefully documented neurological injury case studies where a specific injury, such as a brain tumor, severely damages one of the memory systems while leaving other memory systems intact.

For example, Dr. Oliver Sacks describes a carefully documented case study of a young man with complete loss of ability to lay down new autobiographical memory¹⁷ due to a brain tumor that destroyed the hippocampus on both sides of his brain. Within minutes after the actual event, Greg would lose every trace of autobiographical memory for any personal experience – if you spoke with him for an *hour*, and then left briefly to use the restroom, when you returned *five minutes* later he would have no conscious memory of ever having met you before. However, his other memory systems were still intact:

For example, he could learn new pieces of factual information – even though he did *not* have any *conscious, autobiographical* memories of his conversations with Dr. Sacks, *he could remember the facts of news trivia from these conversations*. If you asked him: "Greg, have you spoken with Dr. Sacks today?" He would respond with something along the lines of "Who's Dr. Sacks? I've never met the man." But if you then asked him: "Who won the baseball game last night?" He could often respond with accurate sports trivia from his conversation with Dr. Sacks earlier that morning: "The Mets won, 7 to 5, with two runs in the ninth inning."

He could learn to find his way around the hospital – even though he did *not* have any *conscious, autobiographical* memories of his years of living at the hospital, *he could walk from his room to the cafeteria without getting lost*. If you asked him: "Greg, can you show me the way to the cafeteria?" He would respond with something along the lines of "I've never seen this place before this morning! How could I know the way to the cafeteria?" But when it was time for lunch he would get up and walk to the cafeteria.

He could learn new physical skills, such as typing or playing the guitar – even though he did *not* have any *conscious, autobiographical* memories of his many practice sessions, *if you put him in front of a typewriter he could type, and if you gave him a guitar he could play.*

He could learn new songs – even though he did *not* have any *conscious, autobiographical* memories of ever hearing the new songs before, *if someone started humming the tune he could sing the rest of the song*.

And he could form new emotional associations – even though he did *not* have any *conscious, autobiographical* memories of previous interactions with people on the staff, *his face would light up when he met those who had been especially kind to him.*

¹⁷ Autobiographical memory is memory for the *story of your life*. If I asked you "what did you do this morning?" you would access your autobiographical memory, and tell me a *story* about this morning's events. For example: "I woke up when the paper-boy threw the newspaper through our living room window at 5:30 a.m., and then I spent the next hour picking broken glass out of the carpet. After that,... etc." Your memory for this story of your morning adventures is autobiographical memory. Remembering the meaning of the word "autobiography" helps me to remember the definition of autobiographical memory: If I wrote a *book* about the *story* of my life, it would be called an *autobiography*; similarly, *memory* for the *story* of my life is *autobiographical memory*.

The most dramatic demonstration of the difference between his severely damaged conscious autobiographical memory and his "other" memory functions was his experience with attending a rock concert. Dr. Sacks took him to a Grateful Dead concert – a band he loved, but that he had not heard for many years. Rock concerts are not particularly subtle – not something you would forget easily. This concert was an *all day* event, and Greg participated *enthusiastically* and *passionately*. The next day, he had *no* conscious, autobiographical memory of going to the concert – *the morning after the concert*, when Dr. Sacks asked him about the Grateful Dead, he reported that he really liked the group but that it had been many years since he had been to one of their concerts. But he *could* remember and sing the new songs from the concert, and he had new positive emotional associations. For example, if Dr. Sacks came to visit, Greg's face would light up and he would greet Dr. Sacks as a fellow Grateful Dead fan.¹⁸

Cases of differential memory damage as dramatic as this are almost hard to believe unless you see them for yourself (actually, they're hard to believe even when you do see them for yourself).

Another especially dramatic case study is presented by Dr. Claparede. Dr. Claparede describes a 47 year old woman who had neurological injury that, like Greg's brain tumor, destroyed her ability to form new explicit autobiographical memory. Like Greg, she would lose all conscious, autobiographical memory of personal experiences in a matter of minutes. Her inability to record new autobiographical memory was so severe that she still did not recognize her surroundings, even after living at the chronic care facility for *five years*. She did not recognize the doctors she saw every day, and continued to greet her nurse as a complete stranger, even after this nurse had been with her for six months.

However, the memory systems for establishing new emotional associations and beliefs remained intact, as demonstrated by a famous experiment performed by Dr. Claparede. While shaking hands with the patient Dr. Claparede stuck her with a pin hidden between his fingers. Several minutes later, when Dr. Claparede again reached out for her hand, she pulled it back and refused to shake his hand. When questioned about her behavior she persisted in her refusal to shake his hand, but appeared to have no conscious memory or insight regarding the recent incident with the pin. Any normal person would have responded to his questions with something direct and obvious, such as "Why do you *think* I don't want to shake your hand? You just stuck me with a pin! (You Jerk!)" Instead, this patient seemed confused, and had difficulty explaining her persistent refusal to shake his hand. Eventually she commented "Is there perhaps a pin hidden in your hand?" When asked why she would have this fear she again had difficulty explaining herself, and eventually responded with comments such as 'That was an idea that went through my mind,' or 'Sometimes pins are hidden in people's hands.' She believed that it was not safe to shake Dr. Claparede's hand, and she held this belief with enough conviction that she refused to shake his hand, even in the face of awkwardness and embarrassment, but she had no conscious autobiographical memory of getting stuck by the pin only minutes before.¹⁹

¹⁸ Sacks, Oliver. An Anthropologist on Mars. (New York: Vintage Books) 1995, pp 42-76.

¹⁹ Claparede, Edouard. "Recognition and 'me-ness.' In D. Rapaport (Ed.), *Organization and pathology of thought* (New York, NY: Columbia University Press), 1951, pages 58-74, specific quotes pages 69-70 (translated from Claparede, E. "Recognition et moiite." *Archives de Psychologie.*, 1911, Vol. 11, pages 79-90).

The point with respect to multiple memory systems is this: The patient still had the memory systems necessary to form new *beliefs, emotional associations, and behavioral responses*, even though she had completely lost the memory system necessary to establish new *explicit autobiographical memories*.

A third neurological case study example is provided by patients with Huntington's disease. A team of researchers has demonstrated that the brain injury caused by Huntington's disease results in loss of the ability to learn new motor skills, while leaving the ability to learn certain other kinds of information unaffected.²⁰

Functional brain imaging: Functional brain imaging, such as SPECT, PET, and fMRI scans, provide more data points that are particularly easy to understand. In short, scans of the living, functioning brain show that there are consistent differences with respect to the neurological circuits that light up when we access different kinds of memory content.²¹

B. Traumatic memories, non-traumatic memories, & the hippocampus: Research studies and case studies specifically focusing on the neurology of non-traumatic memories vs traumatic memories indicate that the phenomena of multiple memory systems applies to non-traumatic vs traumatic memories to some extent. A large collection of research studies and also case studies demonstrate that, on one hand, there is a lot of overlap between the neurological circuits that process, store, and retrieve traumatic memories and the neurological circuits that process, store, and retrieve traumatic memories. However, these research studies and case studies also indicate that there is an important difference with respect to the hippocampus. With memories for *non-traumatic* experiences the hippocampus is centrally involved, mapping and coordinating the different components of each experience into a coherent autobiographical memory package. The hippocampus is also responsible for providing a "librarian" function with respect to storage and retrieval, so that you can find a given memory by consciously and intentionally searching for it. However, with memories for *traumatic* experiences the hippocampus is centrally of the trauma increases. With especially intense traumatic experiences the hippocampus is essentially "off line."²²

Note that traumatic memories and non-traumatic memories are *not* processed, stored, and retrieved by two completely different neurological systems. Two completely separate systems would provide a simpler model, that would in many ways be easier to teach, learn, and use, but unfortunately it would also be incorrect.

C. Different types of memory files: It is also possible that traumatic memories and non-

²⁰ Butters, Nelson; Heindel, William C., & Salmon, David P. "Dissociation of implicit memory in dementia: Neurological implications. *Bulletin of the Psychonomic Society*, July 1990, Vol. 28, No. 4, pages 359-366.

²¹ See, for example: Schacter, Daniel L.; Alpert, Nathaniel M.; Savage, Cary R.; Rauch, Scott L.; Albert, Marilyn S. "Conscious recollection and the human hippocampal formation: Evidence from positron emission tomography." *Proceedings of the National Academy of Sciences, USA*, 1996, Vol. 93, pages 321-325.

²² For a more detailed description of this model regarding the neurological systems for traumatic and non-traumatic memories, and a summary discussion of the research and case study evidence supporting it, see Jacobs, W.Jake, & Nadel, Lynn. "Neurobiology of reconstructed memory," *Psychology, Public Policy, and Law.* 1998, Vol. 4, No. 4, pages 1110-1134.

traumatic memories are processed, stored, and retrieved as different *types of memory files*. This essay is not the place for discussion of the many complex considerations and possible alternative models regarding different types of memory files; however, I would like to describe one possible model that I perceive to be especially strong. Memories for painful experiences are modified as they go through the processing pathway, and my proposed model is that these modifications are an important part²³ of what causes the *qualitative* differences between non-traumatic memories and traumatic memories – these modifications, produced by the successful completion of the processing tasks at each level, cause the resulting fully processed non-traumatic memory to *feel subjectively different* and to *behave differently* than traumatic memories.

For example, consider the level 3 processing task of maintaining/re-establishing access to your relational connection circuits. As you're going through an experience, successful level 3 processing modifies the experience so that it includes access to your relational connection circuits; *and as this happens, the file carrying memory for the experience is modified* so that whenever it is activated in the future the subjective experience of remembering the event will include the perception that there are others that know you and love you, and that these people are a relational resource (even if they are not present in the room). However, if this processing task is *not* successfully completed, and the corresponding modifications to the experience and memory file do *not* get made, then whenever the memory gets activated in the future the subjective experience of remembering the unresolved trauma will include the perception of being relationally isolated in the traumatic event.

Cars being processed on an assembly line provide a helpful analogy. As the car is successfully processed at each station in the assembly line it is modified so that it is *qualitatively* different – it will feel subjectively different and behave differently after the modifications resulting from being processed at each station of the assembly line. For example, one station might install the engine. After successful processing at this station the car will certainly behave much differently. Another station might install the seats and other interior details. After successful processing at this station the car will certainly feel subjectively different. Yet another station might apply rust-proofing and paint. After successful processing at this station the car will look different, and will also behave differently in that it will be much more resistant to rust.

D. Psychological and spiritual phenomena that hinder access and modification:

Furthermore, in addition to increased difficulties caused by being stored, retrieved, and processed by a different memory system, and by being stored, retrieved, and processed as a different kind of memory file, traumatic memories are also associated with psychological and spiritual phenomena that oppose access and modification. For example, we all develop a variety of psychological defenses to manage our traumatic memories, and most of these defenses include some component of trying to keep the traumatic memories *out* of our conscious awareness. When we decide that we want to intentionally activate these memories, as part of psychotherapy or emotional healing ministry, the defenses that have been developed and practiced over many years do not simply vaporize.

²³ I say "part" because it is important to recognize that there may also be other phenomena, such as spiritual issues associated with traumatic memories, that also contribute to the qualitative differences between traumatic and non-traumatic memories.

Vows provide a good example of how psychological defenses²⁴ can get in the way of fully²⁵ accessing traumatic memories. Charlotte and I once worked with a woman who had been receiving emotional healing ministry for years, but she never felt or displayed emotions, even when describing intensely traumatic experiences. She also never appeared to receive any benefit from the ministry sessions. As we worked with her we discovered that she had made a vow to never let herself feel the pain from her many traumatic childhood experiences. We helped her work through this vow, and within *seconds* of releasing it she began to sob with pain from the memories she had previously been discussing without emotion. She continued to sob as she worked through a number of important memories, *now with the emotions connected*, and she experienced dramatic, lasting benefits from this session.

Blocking beliefs (guardian lies) are another psychological phenomena that affect traumatic memories, and these can hinder both access and modification. For example, I have frequently encountered clients who believe things like "I'll go crazy if I remember that," "I'll die if I feel that pain," "I'll never get back out if I fall into those emotions, "or "I can't handle that memory." Not surprisingly, beliefs like these hinder accessing the corresponding memories.²⁶ Blocking beliefs can also hinder modification. For example, soldiers with post traumatic stress disorder often have blocking beliefs along the lines of: "If this pain gets resolved I'll get careless, and get myself killed just like...," or "Carrying this pain is how I honor my fallen comrades. Cooperating with resolving this pain would be to betray and abandon my friends who died in the jungle." Needless to say, this kind of belief gets in the way of participating in therapy or ministry that would modify and resolve the traumatic memories.

With respect to spiritual phenomena, demonic spirits routinely oppose accessing and resolving traumatic memories. My perception, from my own observations and from comments by many other authors, is that demonic spirits like trauma. Unresolved traumas make it easier for demonic spirits to gain access to a person's mind, demonic spirits use the toxic power in traumatic memories to intimidate and manipulate, the pain in traumatic memories often pushes a person to sinful behaviors that give demonic spirits more space in his life, and I'm sure there are other ways, in addition to these, in which demonic spirits take advantage of unresolved traumas. In light of these considerations it should not surprise us that demonic spirits routinely oppose anything that will contribute to resolving traumatic memories, and this certainly includes accessing them and modifying them.²⁷

²⁴ For discussion of how vows are a form of psychological defense, see Lehman, Karl D., "Vows: 'Clutter' That Can Hinder Emotional Healing." <u>www.kclehman.com</u>, 2006.

²⁵ As discussed in Part II, a traumatic memory needs to be fully connected, *including the painful emotions*, in order to be resolved. The woman described in this example could easily access the visual images and autobiographical narratives of the traumatic memories we were working with, but the vow was blocking her from accessing the painful emotions.

²⁶ People are often not even aware of these blocking beliefs, but if you know what to look for you can often spot them as the person encounters resistance while trying to access unresolved trauma.

²⁷ An interesting data point is that I had never knowingly encountered a demonic spirit before I began to use tools that were actually effective for accessing and resolving traumatic memories, but I have *routinely* encountered tangible demonic opposition since I began using tools that have regularly resulted in traumas being resolved. It's almost as if I finally started interfering with something they really cared about.

And since all of these phenomena are *inherently* linked to unresolved traumatic content, they do *not* affect *non*-traumatic memories.

To summarize regarding the differences between traumatic memories and non-traumatic memories:

1.) To some extent, traumatic memories and non-traumatic memories are stored, retrieved, and processed by different *memory systems*.

2.) Traumatic experiences and non-traumatic experiences are probably stored, retrieved, and processed as different *types of memory files* that are *qualitatively* different from each other.

3.) Changes to the memory file as it goes through the processing pathway may be an important factor contributing to the differences between the different *types of memory files*.

4.) Traumatic memories are associated with psychological and spiritual phenomena that oppose access and modification.

With respect to psychotherapy and emotional healing ministry, the functional bottom line is that traumatic memories are stored, retrieved, and processed differently than non-traumatic memories, and two of the most important differences are that traumatic memories are both **more difficult to access** and **more difficult to modify**.

V. Implicit memory vs explicit memory: Another important aspect of the unresolved content carried in traumatic memories is that it often comes forward as implicit memory.

Explicit memory: Explicit memory recall is what we all think of as "remembering." Explicit memory *feels* like "normal" memory. When we recall events through the explicit memory system it *feels, subjectively,* like "I'm remembering something from my personal past experience." For example, if I ask you "what did you do this morning?" you will tell me about getting woken up by the paper boy throwing the newspaper through your living room window at 5:30 a.m., and how you spent the next hour picking up broken glass...etc, *and you will feel* like you are remembering something from your personal past. This *conscious, autobiographical* memory about your personal experiences is explicit memory.

Implicit memory: Implicit memory is all memory phenomena that *does not* include the subjective experience of "I'm remembering something from my personal past experience." Implicit memory content *does not* feel like "normal" memory. When the implicit memory systems are activated our minds and brains recall memory material, but it does not *feel, subjectively* like explicit autobiographical memory.²⁸ Since implicit memory does not *feel* like what we think of as memory, we usually *do not* have any awareness that we are remembering or being affected by past experience when memory material comes forward through one of the implicit memory systems²⁹. When this happens, the person perceives that the implicit memory

²⁸ Even if we are aware that we are being affected by some kind of memory phenomena (for example, we learn to recognize emotional triggering as an implicit memory phenomena), we still don't have the subjective experience of "I am remembering something from my personal past experience."

²⁹ You can learn to recognize the subjective experience of implicit memory being activated with a lot of deliberate practice, but most people have very little awareness or insight regarding implicit memory phenomena.

material, such as the beliefs and emotions associated with a childhood traumatic event, *are true in the present*. We sometimes refer to implicit memory as "invisible" memory, since it usually affects us *without being "seen"* by our conscious minds.

My observation is that explicit memory and implicit memory can be combined in a single recall experience. Take my second grade diarrhea trauma, for example. If someone asks me to describe an especially embarrassing childhood experience, my prefrontal cortex strategic search function will find the memory of my diarrhea disaster, and I will remember this event as an autobiographical story package. However, even though I am aware that I am remembering an autobiographical experience, and the visual imagery and memory for the dialogue feel like normal, explicit, autobiographical memory, the *unresolved content* still comes forward as implicit memory thoughts and emotions *that feel true in the present*, as opposed to just feeling like *memories* of thinking "I'm such a loser" and feeling inadequate and humiliated. In this situation, I am at least consciously aware of the connection – I realize that the implicit memory thoughts and feelings are associated with the second grade diarrhea memory.

While implicit memory sometimes comes forward in combination with explicit memory, where it is at least consciously recognized as coming from an unresolved trauma, the much more common phenomena is for a trigger to directly activate traumatic memory *components* through association stimulation, so that the unresolved content comes forward as *isolated* implicit memory³⁰ *that is not recognized as memory*. For example, a peer laughing at me in a certain way might trigger just the cognitive and emotional components of my diarrhea trauma, causing me to think "I'm a loser" and feel shame, *but with no awareness that this thought and emotion is actually coming from the underlying traumatic memory*.

My experience with dyslexia provides another good example of unresolved traumatic content coming forward as isolated, unrecognized implicit memory. When I tried and tried, but could not do something that all the other kids appeared to be handling easily, I felt hopeless, I felt inadequate, and I concluded that I was stupid. Then, for most of the rest of my life (until these traumatic experiences got healed), whenever I would encounter a new, complex, difficult problem I would have the thought "I'm just stupid," I would feel hopeless and inadequate, and I would expect to fail. *But I never realized that this was memory content*. When this content from my kindergarten and first grade experiences would get activated as implicit memory, these thoughts and emotions would *feel true in the present*, and I would have *no awareness that these thoughts and emotions were coming from my childhood memories*.

Implicit memory content from unresolved traumatic events might include disorganized attachment, attachment pain, dissociative disconnection, unprocessed sensory input (the sights, sounds, physical sensations, etc of flashbacks), loss of access to your relational connection circuits and all that goes with this (such as lack of joy and the subjective perception of being isolated), feelings of inadequacy, confusion, distorted interpretations ("lies" in Theophostic® vocabulary), and negative left-sided emotions driven by the distorted interpretations. This implicit memory content will cause a wide variety of problems as it comes forward and blends with our experience in the present. For example:

³⁰ Traumatic experiences are especially likely to come forward as implicit memory when they are more intense (the hippocampus is more impaired), and less processed (level 4 does not contribute the subjective perception that you are a part of the experience).

Post traumatic stress disorder: PTSD flashbacks again provide an especially dramatic example. Post traumatic stress disorder results in both physical and emotional problems, and all aspects of this disorder are caused by unresolved trauma. As described above, unresolved traumatic content that has been disconnected at level 2, and then comes forward as totally unprocessed, intensely disruptive flashbacks is the most dramatic example.

Isolated physical symptoms: Unprocessed physical sensations coming forward as implicit memory can cause a wide variety of physical symptoms. We have had a number of patients who spent thousands and thousands of dollars on medical care for puzzling physical symptoms – symptoms that modern medicine was not able to diagnose or treat, but that evaporated when we found and resolved traumatic memories with content that exactly matched the physical symptoms.

Anxiety disorders: Panic attacks, phobias, obsessive compulsive disorder, and many other anxiety disorders are often caused by distorted beliefs and their associated dysfunctional emotions coming forward as implicit memory. The live ministry session "Lisa, Childhood Surgery, Panic Attacks, and Abreaction" portrays this dramatically. The distorted level 5 interpretation "I'm going to die," and the associated emotions of helplessness and terror, caused Lisa to have panic attacks whenever the unresolved memory of her traumatic childhood operating room experience would get activated.

Depression: Depression is often caused by attachment pain and/or distorted beliefs coming forward as implicit memory. The live ministry sessions portraying Chrystal's healing journey provide an example of attachment pain causing depression. As Chrystal clearly describes, the attachment pain from losing her father caused depression whenever it would come forward as implicit memory. We have also seen many cases where depression is caused by Level 5 distorted interpretations associated with unresolved traumatic memories. For example, if an alcoholic father molests his child and then leaves the family, the child often comes up with distorted interpretations such as "He molested me and left me because I'm worthless, and there's nothing I can do about it." Whenever this implicit memory content gets triggered forward, *and feels true in the present*, the child will *believe* "I'm worthless," "It's hopeless," and these beliefs then generate the corresponding left-sided emotions of worthlessness and hopeless despair. If these thoughts and emotions are activated frequently and intensely they can cause full blown major depression.

Eating disorders: Eating disorders are often caused by attachment pain and/or distorted beliefs coming forward as implicit memory. The live ministry session, *Eileen: Immanuel Intervention (Intermediate)*, provides an example of attachment pain causing a dysfunctional eating pattern, and it is especially interesting to note that Eileen's problematic eating with respect to ice cream completely resolved after Jesus healed the attachment pain.

Addictions: Overeating, alcohol and drug abuse, pornography, and many other forms of addictive behavior are often (usually? always?) attempts to self medicate various types of trauma pain that are coming forward as implicit memory.

Relational conflicts: Many, many, many interpersonal conflicts are caused and/or exacerbated by some combination of unresolved attachment pain, right-sided emotions with loss of relational connection, distorted interpretations, and negative left-sided emotions driven by the distorted interpretations *all coming forward as implicit memory*. Unresolved traumatic content,

coming forward as implicit memory, contributes to marital discord, conflicts between family members, conflicts between friends, conflicts in church, conflicts on the mission field, conflicts between neighbors, conflicts between employers and employees, conflicts between professional colleagues, conflicts between students and teachers, conflicts between warring tribal groups in Africa, conflicts between Arabs and Israelis, and even conflicts between complete strangers.

Impaired parenting: Unresolved trauma coming forward as implicit memory can impair your ability to parent in so many ways that you could write an entire book on the subject. In fact, somebody already has – one of the main themes in *Parenting From the Inside Out*,³¹ an excellent book by Dr. Daniel Siegel and Mary Hartzell, is the ways in which unresolved issues can hinder a person's ability to parent well.

One of the most serious parenting problems is caused by memories for experiences where you were unable to maintain access to your relational connection circuits. If your child does something that activates these memories you may be drawn back into the place where your inadequate level 3 skills caused you to temporarily lose the relational aspect of your self. When this happens, not only will you not attune to your child, but you will become completely nonrelational in your attempt to manage the situation and stop the painful emotions. *This is the unfortunate context in which parents do the most profoundly hurtful things to children they dearly love*.

Difficulty receiving new truth: We will have trouble receiving new truth if the erroneous beliefs we are trying to correct are actually trauma-associated distorted interpretations coming forward as implicit memory. For example, a pastor might do an excellent job of presenting Biblical truths, but if some in the audience have trauma-associated beliefs that oppose the teaching content it will be very difficult for these people to hold onto the Biblical truths whenever the opposing beliefs are triggered. However, if the opposing trauma associated distorted interpretations are resolved, these people will be able to learn, embrace, and apply the truth being presented.

Hindered evangelism: Many who resist the Gospel have had traumatic experiences with Christianity. When you talk to these people about the Lord, their openness is hindered by unresolved traumatic content coming forward as implicit memory.

Impaired discernment: Traumatic implicit memory content can interfere with the guidance we receive from our intuitive right hemisphere in a number of ways. One of the most dramatic is that we can mistake triggered implicit memory for guidance from the Holy Spirit. For example, subtle triggering can cause you to feel a vague, "hard to put your finger on it" resistance to taking a certain action, and this subtle, vague, intuitive reluctance can be mistaken for the kind of Holy Spirit guidance that some call a "check in the Spirit."

Blocked peak performance: In any situation we might be in, we will not be able to function at peak performance if something triggers underlying traumatic memories so that some combination of flashback sensory input, attachment pain, unprocessed right-sided emotions, losing access to our relational connection circuits, feeling inadequate, confusion, distorted interpretations, and lie-driven dysfunctional emotions comes forward as implicit memory.

³¹ Siegel, Daniel J., and Hartzell, Mary, *Parenting From the Inside Out*. (New York: Jeremy P. Tarcher/ Putnam, a member of Penguin Putnam Inc.) 2003.

These factors can impair our ability to function on the job, our academic performance, our ability to excel in athletic competition, and our ability to deliver peak performance in many other situations.

An interesting data point with respect to traumatic memories and functional impairment is the growing phenomena of using EMDR to enhance peak performance. For example, if you put "Peak performance and EMDR" in the search box on Google or Yahoo, you will find hundreds and hundreds of websites put up by mental health professionals advertising individual therapy, seminars, and workshops using EMDR to enhance peak performance. There are also articles in professional journals describing the use of EMDR to further increase performance in those who are already doing well.³² One of the most interesting data points discussed in these articles is that Olympic athletes are now using EMDR to help them release their potential to the fullest extent. My perception is that the biggest factor contributing to EMDR's success with respect to enhancing peak performance is that it resolves underlying trauma – trauma that impairs the person whenever the toxic content it carries gets triggered forward, *and that especially interferes with performance during situations of increased intensity and strategic importance*.

VI. "Trigger," "triggering," and being "triggered": Mental health professionals, others involved in emotional healing, and even the general public are increasingly using the terms "trigger," "triggering," and being "triggered." My perception is that different people use these terms in different ways, and that this can cause unnecessary confusion. Now that we have discussed the preliminary concepts of psychological trauma, traumatic memories, explicit memory, and implicit memory, I would like to provide the definitions for trigger, triggering, and being triggered that we will use in all of our material. I am "triggered" when some stimuli in the present (a "trigger") causes my brain/mind to open a traumatic memory file, so that the memory for an unresolved painful experience is activated. When an unresolved traumatic experience is activated, various aspects of the experience, such as thoughts, emotions, and physical sensations, come forward and *feel true in the present*. Whenever implicit memory content from an unresolved trauma is active in the present, I am triggered; and whenever I am triggered, implicit memory content from unresolved trauma is active in the present.

For example, before she got healing around this issue, if someone would refer to Charlotte's Asian facial features thoughts such as "I don't belong," "I'm not a real person," "I'm inferior," and "I'm ugly" would spontaneously come into her mind, and she would feel the corresponding left-sided emotions of insecurity and shame. Although they would *feel* like valid responses to the present situation, these negative thoughts and emotions were actually implicit memory content coming forward from unresolved traumatic memories of people taunting her with racial slurs and exaggerated "Asian" faces. The stimuli in the present – someone referring to her Asian appearance – was the **trigger**, and when this trigger caused thoughts and feelings from the underlying traumatic memories to come forward and feel true in the present, she was **triggered**.

³² See, for example, Foster, Sandra, & Lendl, Jennifer, "Eye Movement Desensitization and Reprocessing: Initial applications for enhancing performance in athletes." *Journal of Applied Sports & Psychology*. 1995, Vol.7, Supplement 63; Foster, Sandra, & Lendl, Jenniger, "Peak performance and EMDR: Adapting trauma treatment to positive psychology outcomes and self-actualization," accessed July 26, 2008, <u>http://www.psicotraumatologia.com/foster.rtf;</u> and Foster, Sandra, & Lendl, Jennifer, "Eye Movement Desensitization and Reprocessing: Four case studies of a new tool for executive coaching and restoring employee performance after setbacks." *Consulting Psychology Journal: Practice and Research*, Summer 1996, pages 155-161. **Req, with two others, July 3, 2008**

"Triggering" refers to the process of a person or memory being triggered, and might be used as follows: "I think **triggering** has contributed to the persistent conflicts in our church board meetings," or "Even though he has only had one beer and isn't the least bit drunk, the smell of alcohol on her husbands breath is **triggering** Mary's memories of growing up with an alcoholic father."

VII. Verbal logical explainer (VLE) and confabulation: When dealing with unresolved traumatic content coming forward as implicit memory, there is a particular phenomena that makes the situation even more difficult.

This "particular phenomena" is the part of our brain/mind/spirit that I call our "Verbal Logical Explainer," or VLE. The VLE's job is to come up with "explanations" that help us organize and make sense out of our experiences and the world around us. Most of the time this is a good thing. Our VLE is constantly coming up with explanations that help us make sense out of our lives, and it usually works so quickly and smoothly that we don't even notice it. It also usually starts with basically adequate and accurate data, and comes up with basically valid explanations. However, if the VLE starts with distorted and/or inadequate data it can come up with profoundly flawed explanations. For example, if the VLE starts with thoughts and emotions that are actually from unresolved trauma, but that are coming forward as "invisible" implicit memory so that they feel true in the present and the person has no awareness of their real origin, the VLE will "make up" explanations for how these thoughts and emotions are being caused by *circumstances in the present*.

There are fascinating research studies and clinical case studies that demonstrate the sobering ability of the VLE to "make up" flawed explanations when it is given flawed and/or inadequate information. One of the most dramatic sources of information about the verbal logical explainer comes from split-brain research. Some people have extremely severe seizure disorders that do not respond adequately to medication. Even on several simultaneous medications, each at maximum dosage, these patients might still be having twenty, thirty, or even fifty seizures every day; and if this kind of seizure activity is allowed to continue it will cause progressive brain damage that eventually ends in death. For these patients, one of the last ditch treatment options is to cut the pathways that connect the right and left sides of the brain, so that seizures starting on one side will not spread to the whole brain (this is pretty drastic, but it's better than progressive brain damage and death).

When the two sides of the brain are separated in this way the Verbal logical explainer on the left side no longer receives communication from the right side, and this leads to some very interesting results when the VLE tries to explain right-sided behavior. For example, in one study the patient was first shown a card with a single image, and then shown a card with a number of different images from which he was asked to pick the item most related to the first picture. Because of how the neurology of the visual system is designed it is possible to simultaneously show one image to the right side of the brain and a different image to the left side of the brain, and the research team designed special equipment that could do this. The patient was then shown an initial image that presented a picture of a chicken foot to the *left* side of his brain and a picture of a snow storm to the *right* side of his brain. When he was shown the second set of pictures, his right hand (corresponding to the left side of his brain) immediately pointed to the picture of a chicken, while his left hand (corresponding to the right side of his brain) pointed to the picture of a snow shovel. The *left* side of the brain saw the chicken foot and then chose the chicken, while the *right* side of the brain saw the snow storm and then chose the snow shovel.

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This was not particularly surprising. *But then the researchers thought to ask the patient to explain his choices*. He first explained that he had chosen the chicken to go with the chicken foot, which again surprised no one. However, when they asked him to explain why he had also chosen the snow shovel, instead of acknowledging "I don't know," or even "I'm not sure," he promptly responded that if you had chickens you would need something with which to clean out the chicken shed. Aware that he had chosen the snow shovel, but completely unaware of the fact that this picture was chosen in response to the initial image of the snow storm, his left sided verbal logical explainer just made something up. Furthermore, the patient appeared to have no awareness that his left-sided VLE had confabulated an explanation that had absolutely nothing to do with the real reason he had chosen the picture of the snow shovel.³³

Research with hypnosis provides another source of dramatic information regarding the verbal logical explainer. For example, a well known and often repeated demonstration, where the person is not consciously aware of a post-hypnotic suggestion as the true cause of a particular action, again exposes the VLE "making something up" when the person is asked to explain his behavior. While the demonstration subject is in hypnotic trance the hypnotist makes the post hypnotic suggestion: "When I tap three times on the table with my pencil, you will get up and open the window, and you will not remember that I gave you these instructions until I give you permission to do so." The subject is brought out of hypnotic trance, and then several minutes later, after the demonstration appears to have been completed, the hypnotist "absent mindedly" taps his pencil on the table. The subject gets up and opens the window, and as he's returning to his seat the hypnotist asks "why did you open the window?"

You might think the person would pause, look confused, anxious, and maybe also embarrassed, and then respond with something along the lines of: "Well, I – I don't really know. This is actually kind of weird. I was sitting there listening to your presentation, and then I suddenly had this irrational impulse to get up and open the window. I hope I'm not going crazy or something!" However, this is not what happens. The person might pause for the *briefest* moment, an expression of confusion might *flicker* across his face, and then he responds with something like: "It was getting stuffy in here, so I thought I'd open the window." With most subjects the moment of hesitation is barely discernable, and the person appears to be *completely unaware* of the fact that his VLE has just constructed a *totally fabricated* explanation.

Children have VLEs that are still quite primitive, and therefore provide yet another place where it is easy to recognize that our VLEs often "makes things up." For example, a number of years ago Charlotte and I spent a week with my sister, Emily, and her family; and after we left our four year old niece, Miranda, was having a terrible horrible no good very bad day.³⁴ Throughout the day she became increasingly fussy, irritable, whiny, and frustrated with everything and everybody. Finally, as Miranda was brushing her teeth in preparation for going to bed, Emily asked her "What's the matter, honey? Why are you so upset?" And Miranda, looking at the toothbrush she was holding in her hand at that moment, responded with: "*Because the tooth brush is orange*!!!!"

³³ For a thorough discussion of the original research, see Gazzaniga, Michael S. and LeDoux, Joseph E. *The Integrated Mind*. (New York, NY: Plenum Press), 1978, pages 146-150; for Dr. Gazzaniga's account of his thoughts and internal subjective experience as he performed the experiment, see Zimmer, Carl, "A Career Spent Learning How the Mind Emerges From the Brain." *The New York Times*, Tuesday, May 10, 2005, page F3.

³⁴ This description should have special meaning for those of you familiar with the children's book *Alexander and the Terrible Horrible No Good Very Bad Day*.

When asked to come up with an explanation for why she was so upset, her four year old VLE, seeing the tooth brush in front of her face and having no insight regarding the attachment pain caused by Charlotte and I leaving, came up with an explanation that had *nothing* to do with the real reason for her emotional distress: "I'm upset because the toothbrush is orange!!"³⁵

Patients with Korsakov's syndrome provide some of the most dramatic case study information regarding the verbal logical explainer. Korsakov's syndrome produces a very specific kind of brain damage that results in a form of memory impairment much like that displayed by Greg in the case study example described earlier – the person retains memory for events prior to the illness, but is not able to form any *new* autobiographical memories. And in some cases of Korsa-kov's syndrome the person's verbal logical explainer also seems to be particularly unaware of the memory impairment. This results in a dramatic situation in which the person's verbal logical explainer has *no* autobiographical information regarding the many months (and often many years) between the onset of the illness and the immediate present, seems to be completely unaware of this huge lack of accurate contextual information, and therefore constantly "makes up" explanations based on the combination of painfully outdated information from his distant past and the information immediately in front of him.

Dr. Sacks provides the following verbatim transcript from an interaction with one of his patients with Korsakov's:

"What'll it be today?' he says, rubbing his hands. 'Half a pound of Virginia, a nice piece of Nova?' (Evidently he saw me as a customer – he would often pick up the phone on the ward and say 'Thompson's Delicatessen').

'Oh Mr. Thompson!' I exclaim. 'And who do you think I am?'

'Good heavens, the light's bad – I took you for a customer. As if it isn't my old friend Tom Pitkins...Me and Tom' (he whispers in an aside to the nurse) 'was always going to the races together.'

'Mr. Thompson, you are mistaken again.'

'So I am,' he rejoins, not put out for a moment. 'Why would you be wearing a white coat if you were Tom? you're Hymie, the kosher butcher next door. No bloodstains on your coat though. Business bad today? You'll look like a slaughterhouse by the end of the week!'

Feeling a bit swept away myself in this whirlpool of identities, I finger the stethoscope dangling from my neck.

'A Stethoscope! He exploded. 'And you pretending to be Hymie! You mechanics are all starting to fancy yourselves to be doctors, what with your white coats and stethoscopes – as if you need a stethoscope to listen to a car! So, you're my old friend Manners from the Mobil station up the block, come in to get your boloney-and-rye...'

³⁵ We know the problem really was attachment pain because after Miranda's angry accusation blaming the terrible orange toothbrush, Emily gently suggested: "I wonder if you miss Aunt Charlotte and Uncle Karl?" Miranda paused for a moment, and then started sobbing "yeee-ee-ee-ee-ss." Emily held her, comforted her, and talked with her about how much fun it had been to spend time with Charlotte and I, about how it was okay to be sad that we had left, and about how we would come back again next year. After having a good cry and receiving Emily's attunement, Miranda's usual pleasant disposition promptly returned.

William Thompson rubbed his hands again, in his salesman-grocer's gesture, and looked for the counter. Not finding it, he looked at me strangely again.

'Where am I?' he said, with a sudden scared look. 'I thought I was in my shop, doctor. My mind must have wandered...You'll be wanting my shirt off, to sound me as usual?'

'No, not the usual. I'm not your usual doctor.'

'Indeed you're not. I could see that straightaway! You're not my usual chest-thumping doctor. And, by God, you've a beard! You look like Sigmund Freud – have I gone bonkers, round the bend?'

'No, Mr. Thompson. Not round the bend. Just a little trouble with your memory – difficulties remembering and recognizing people.'

'My memory has been playing me some tricks,' he admitted. 'Sometimes I make mistakes – I take somebody for somebody else....What'll it be now – Nova or Virginia?'

So it would happen, with variations, every time – with improvisations, always prompt, often funny, sometimes brilliant, and ultimately tragic. Mr. Thompson would identify me – misidentify me, pseudo-identify me – as a dozen different people in the course of five minutes. He would whirl, fluently, from one guess, one hypothesis, one belief, to the next, *without any appearance of uncertainty at any point*...." (emphasis mine)³⁶

As is especially clear from this example, a person's VLE has an amazing ability to "make things up," and this amazing ability to fabricate can be accompanied by an alarming absence of self awareness.

With respect to unresolved trauma and implicit memory, the relevant point is that your VLE will quickly and smoothly come up with an "explanation" for why and how your *current circum-stances* are causing you to experience any triggered thoughts and emotions (thoughts and emotions that are actually content from unresolved trauma coming forward as implicit memory). And, unfortunately, the confabulated, flawed VLE "explanations" *feel* very much like valid VLE explanations. Without a lot of deliberate practice, most of us don't seem to perceive any difference between valid explanations and confabulated, flawed explanations.

Having an "explanation" that accounts for the triggered thoughts and emotions as being reasonable responses to events in the present makes the implicit memory content even more difficult to recognize for what it is. When unresolved trauma, implicit memory, and VLE explanations come together in this way you will try to resolve your painful thoughts and emotions by focusing your energy and attention on the triggers in the present, as if they are the true source of the implicit memory traumatic content; and if the trigger happens to be another person's behavior you will try to resolve your painful thoughts and emotions by attempting to make her change this terrible behavior that is causing all your problems. Furthermore, it will feel intensely subjectively true that she should take responsibility for causing your *implicit memory pain* – you will not just want her to take responsibility for the behavior that *triggered* the underlying trauma, you will want her to confess, apologize, and make restitution as if she caused the full extent of the pain in the underlying traumatic memory. And you will not feel heard,

³⁶ Sacks, Oliver. *The Man Who Mistook His Wife for a Hat*. (New York: HarperCollins) 1970, pp 108 & 109.

Detective stories provide a good analogy. In the really good detective stories the criminal does not just leave an unsolved crime, with a team of investigators that are still trying to find him. The smart criminal is always careful to frame someone else, so that the case is closed. The smart criminal wants to see someone else convicted for his crime, so that the detectives stop looking for clues. The combination of unresolved trauma coming forward as implicit memory and VLE explanations is similar, in that the problem is not left as an "unsolved crime," where you are still looking for clues. The implicit memory content *feels* true in the present, and your VLE comes up with an explanation for why the triggers in the present should take full responsibility for the implicit memory content that has come forward. You are no longer looking for clues because someone has already been arrested and convicted. This analogy is particularly valid because an important part of the damage from this combination of trauma, implicit memory, and VLE explanations is that people in the present get "framed" for content that is actually coming from underlying trauma.

For example, let's say Nancy had an alcoholic father who was emotionally and physically unsafe. Whenever he got angry he would threaten, bully, and intimidate, and this frightening behavior frequently escalated to actual physical violence so Nancy knew he was not just bluffing. This scenario occurred over and over throughout Nancy's childhood, and she has many traumatic memories of these events. Now, twenty five years later, Nancy is married to David, who occasionally gets angry but never bullies, intimidates, threatens, or gets violent. However, whenever David gets angry Nancy *feels* bullied, intimidated, and threatened because his anger triggers her unresolved memories, and the toxic content comes forward as implicit memory that feels true in the present. Furthermore, her VLE looks at the information in front of her and comes up with an "explanation" along the lines of: "I feel bullied, intimidated, and threatened, and I'm having these feelings because David is bullying, intimidating, and threatening me with his anger. He *feels* dangerous when he's angry, and I know he'll escalate to violence if I don't do what he wants...etc." She is vaguely aware that she has never seen David get violent, with her or anyone else, and also that she can't identify any actual specifics that would indicate bullying, intimidation, or threat; but she still accepts the combined implicit memory and VLE explanation package because it feels so compellingly true.

This combination of implicit memories and erroneous VLE explanations creates a point of unresolvable conflict.³⁷ Whenever this memory content is active, Nancy will only feel heard, validated, safe, and ready for reconciliation if David takes full responsibility for intimidating and bullying her by threatening violence. This *was all true with respect to her father*, and her demands *would have been appropriate with respect to her father*, but the combination of her implicit memories and VLE explanations also create the *subjectively compelling perception*³⁸ that this same picture *is true in the present with respect to David*. However, since this picture is *not* actually true in the present he cannot honestly own it. They are therefore stuck with an unresolvable conflict, where she's demanding that he acknowledge what feels compellingly true to her, and he's refusing to own what he knows is not his.

³⁷ In the language of our divorce courts, this would be an "irreconcilable difference."

³⁸ It is almost impossible to overstate the intensely compelling quality of the combined implicit memories and VLE explanations.

John and Sara provide another example. When John was a boy his father spent most of his time and energy building an increasingly successful business, ignoring John's mother who became increasingly lonely. John's mother eventually got a job outside of the home in order to have more interaction with other adults, and her beauty and intelligence did not go unnoticed. Her boss appreciated her competence, perceived her as attractive, and genuinely enjoyed her company. Initially, this friendship seemed like a good thing. John noticed that his mother's boss was very kind to her, he often noticed his mother smiling as she talked to her boss, and she was generally much happier. Unfortunately, what began as a friendship developed into an affair, and John's mother eventually left the family in order to marry her boss.

Now, twenty five years later, John is married to Sara, who is outgoing and friendly to all her acquaintances, *including men*. John has never observed her engaging in behavior that anybody else would consider even the least bit inappropriate; however, when he finds her talking to and smiling at other men *he feels vulnerable, fearful, betrayed, and rejected*. When he sees Sara smiling at her male friends, his unresolved memories are triggered and the toxic content comes forward as implicit memory *that feels true in the present*. It *feels true* that Sara is engaging in inappropriate intimacy that will lead to an affair (if she's not *already* having an affair), and it *feels true* that Sara will eventually abandon him to run off with another man. Furthermore, his VLE looks at the information in front of him and comes up with an "explanation" along the lines of: "I feel anxious and betrayed, and I'm having these feelings *because Sara is being unfaithful*. I wouldn't feel this way if she weren't doing *something* inappropriate....etc." He is vaguely aware of the reality that he cannot explain exactly why Sara's friendly smiles are inappropriate, and that he has never observed any other inappropriate behavior, but he still accepts the combined implicit memory and VLE explanation package *because it feels so compellingly true*.

This combination of implicit memories and erroneous VLE explanations once again creates a point of unresolvable conflict. Whenever this memory content is active, John will only feel heard, validated, safe, and ready for reconciliation if Sara takes full responsibility for being unfaithful. He admits that he has absolutely no evidence indicating that she has had an actual *physical* affair, but he *fears* that she may be having sex with these other men, and he wants her to at least take responsibility for having an *emotional* affair with any male friend she frequently smiles at. At the very least, he wants her to acknowledge that her smiling at other men is inappropriate. *His mother's* friendship and smiles did become inappropriate, and *his mother* did have an affair, but the combination of his implicit memories and VLE explanations also create the *subjectively compelling perception* that this same picture is true in the present *with respect to Sara*. However, since this picture is *not* actually true in the present she cannot honestly own it. They are therefore stuck with an irreconcilable difference, where he's demanding that she acknowledge what feels compellingly true to him, and she's refusing to own what she knows is not hers.

Returning to my dyslexia trauma provides a third example that is less dramatic but a lot closer to home. As described earlier, I had great difficulty in learning to read. In spite of my best efforts during the two years of kindergarten and first grade, I could not do something that all the other kids appeared to be handling easily. At this point I needed a lot of help from the adults in my life: I needed my teachers to recognize my learning disability and initiate special assistance so that I would not remain hopelessly stuck with a problem I could not solve; I needed my parents and teachers to help me with the level 4 task of navigating the painful experience of repeated failure, especially in a context where others were succeeding; and I needed my parents and teachers to help me with the level 5 task of correctly interpreting the meaning of my reading difficulties.

Unfortunately, none of this happened. My teachers failed to recognize my dyslexia and instead concluded that I just wasn't trying, and my parents were unaware of the problem (I tried hard to forget about school as soon as I got out of the building, and I never talked about it at home). Furthermore, my classmates would laugh at my dyslexic mistakes and make various comments implying that I was stupid. As a result of all this I felt inadequate because I could not learn how to read, I felt inadequate because I was unable to successfully navigate the experience of failing at a task others could do easily, I came to the distorted conclusion that I was stupid, and I felt shame as a result of this distorted interpretation. Not surprisingly, with two years of daily practice I developed a very specific *inadequate* – *"I'm stupid"* – *shame* package that would especially get triggered by any situation where I was having difficulty but others were doing well.

Now, forty years later, I'm playing scrabble with Charlotte. Charlotte: "Oh, look at this! I can spell 'quiz,' with a triple letter score for "z" and a double word score for the whole word! Let's see...that comes to 97 points." Karl: "Well, I can spell trigger, with a triple letter bonus on the two-point "g", but all the other letters are just one-pointers. How come my word is longer than yours, but I only get 15 points?!" This goes on, move after move, until we finish the game with Charlotte at 758 and Karl at 247. An objective, outside observer would see that Charlotte is just having a good time playing scrabble, and that she's particularly good at it. This same observer would also see that she's smiling, glad to be with me, and not doing anything inappropriate or inconsiderate. Unfortunately, I am *not* able to see through the eyes of our theoretical observer. As Charlotte is doing so well and I'm having so much difficulty, I *feel* increasingly inadequate, stupid, and humiliated because this particular scenario triggers my unresolved memories *and the toxic content comes forward as implicit memory that feels true in the present*. It *feels* true that her dramatic victory is the true source and origin of my painful thoughts and emotions.

Furthermore, Charlotte does not recognize or fix the problem. Our objective, outside observer would notice that I haven't said anything and that I'm doing a good job of hiding my growing unhappiness. Our helpful observer would probably also realize that it's *my* adult maturity responsibility to notice that I'm not doing well, it's *my* adult maturity responsibility to let Charlotte know there's a problem, it's *my* adult maturity responsibility to *ask*³⁹ for her assistance, and it's *my* adult maturity responsibility to retain ownership of *my* problems regardless of whether or not Charlotte gives me the help I ask for. Unfortunately, I am once again unable to perceive the situation from the perspective of our oh-so-helpful observer. *As more traumatic content comes forward as implicit memory that feels true in the present*, I become increasingly angry at Charlotte for not taking responsibility for my care. It *feels* true that I need help from the adults in my life – it *feels* true that *Charlotte* should notice my distress, figure out what's wrong, and "initiate special assistance;" it *feels* true that *Charlotte* should take responsibility for helping me navigate failure in a situation where others are succeeding; it *feels* true that *Charlotte* should lead in the process of helping me interpret the meaning of the experience; *and it feels true that Charlotte is makes her responsible for my pain.*

To make matters even worse, Charlotte occasionally tries to be helpful by pointing out how I could have earned three times as many points if I had used the same letters to spell a different

³⁹ Part of my adult maturity responsibility is to make sure my *asking* is a "clean" request – a request that is free of entitlement or any implication that there will be consequences if the answer is 'No.' For an especially excellent discussion of "clean" requests, see Dallas Willard's discussion of "the dynamic of the request" (Willard, Dallas, *The Diving Conspiracy: Rediscovering Our Hidden Life in God* (HarperCollins: New York, N.Y.) 1998, pages 231-244).

word, strategically placed at a spot on the board that would have made use of bonuses. Our objective, non-triggered observer, perceiving things correctly, would see that she's trying to help me become a better Scrabble player by offering coaching tips, and that she's offering her tips in a friendly, encouraging manner. Unfortunately, I'm *still* not able to see the situation through the eyes of our objective, non-triggered, always-better-than-me observer (*thank you very much*). Charlotte's comments unconsciously remind me of my classmates pointing out my failures, and this becomes yet another way in which the scrabble scenario triggers my unresolved memories. *Even more toxic content comes forward as implicit memory that feels true in the present*, and it *feels* true that she's being hurtful by making comments that just highlight my stupidity.

My VLE looks at all of this and comes up with an "explanation" along the lines of: "*She's* the one who keeps playing so hard even when she's already way ahead, and *she's* the one who keeps pointing out how I could've made better moves. She should notice that she's beating me by such a wide margin, she should notice that this is bothering me, she should care for my distress by 'backing off,' and she should realized that her 'tips' are just making things worse. It's her failures to be sensitive and considerate that are 'making' me feel so bad. *I* would be *fine* if she would just stop beating my pants off and then making insensitive remarks implying that I'm an idiot." At some vague level I realize that I can't explain exactly why her doing so much better than me is making me feel *so* bad, and that I can't explain exactly why it should be *Charlotte's* responsibility to notice that I'm unhappy, figure out what's the matter, and initiate fixing the problem; but I still accept the combined implicit memory and VLE package *because it feels so compellingly true*. At some level, my internal response is: "I can't articulate all the reasons right now, *but I know I'm right*. She's doing *something* wrong to make me feel so bad, she's responsible for my distress, and she ought to be doing a lot more to fix the problem."

To the extent that I was unable to recognize and own my triggering and VLE confabulations, this combination of implicit memories and confabulated explanations created a point of unresolvable conflict with respect to my scrabble pain. I would only feel heard, validated, safe, and ready for reconciliation if Charlotte took responsibility for causing my pain, and especially took responsibility for failing to care for me. This would have been at least somewhat appropriate *with respect to my parents and teachers regarding my kindergarten and first grade experience*. In kindergarten and first grade, it *was* appropriate for me to expect my teachers to care for me. It *was* appropriate for me to expect my teachers to figure out what was the matter and take responsibility for initiating assistance, and they *did* set me up for feeling inadequate by failing to recognize my learning disability or initiating special assistance. It *was* appropriate to expect the adults in my life to take the initiative in helping me navigate the difficult situation of being unable to learn something other kids were mastering easily, it *was* appropriate to expect them to help me interpret the meaning of the experience, and they *did* contribute to my pain by failing to provide this care.

All this would have been appropriate and accurate *when I was six years old with respect to my teachers and parents*, but the combination of my implicit memories and VLE explanations also created the <u>subjectively compelling perception</u> that this same picture *was true in the present with respect to Charlotte*. However, since this picture was *not* actually true in the present with respect to Charlotte, she could not honestly own it. We were therefore stuck with an irreconcilable difference, where I was demanding that she acknowledge what felt compellingly true to me, and she was refusing to own what she knew was not hers.

Note regarding examples: Our examples are simplified so that it is easier to see the teaching

points. In "real life," you seldom see conflicts where one person carries all of the triggering and the other is essentially perfect. Most "real life" situations are messier and more difficult to sort out because there is triggering and imperfection on both sides. For no extra cost, I will offer a systems perspective insight related to this reality that "real life" situations are messy and complicated: if you want to help your spouse/friend/child...etc be able to see her stuff, keep taking care of yours. The cleaner you are, the less complicated the situation will get and the easier it will be for the other person to recognize her triggering and see the holes in her VLE confabulated explanations.

VIII. Other levels of central nervous system extrapolation: Even with all of this information regarding implicit memory, the VLE, and confabulated explanations it is still hard to understand the incredibly compelling subjective experience of *feeling* implicit memory content *as if it is true in the present*, and the equally compelling subjective experience of *believing* that the triggered thoughts and emotions *are being caused by events in the present*. As I studied these phenomena, I found it particularly difficult to understand why we believe our VLE explanations even when they have so many holes. For example, in the scenarios presented above systematic evaluation by an outside observer would quickly reveal the weakness of Nancy's VLE explanation. If I were one of her close friends I could easily point out many flaws in her assessment:

"So you're saying that David was bullying and intimidating you by threatening violence when he got angry about you getting another parking ticket? I was there – remember? He was angry for a minute or two, but then he cooled down, and it seemed like he'd forgiven you completely by the end of dinner. Didn't you tell me once that he has never even *hinted* that he might hurt or punish you if you didn't do what he wanted? And didn't you tell me that he has never made any kind of threatening gesture, like raising his hand, or even leaning toward you in a menacing way? And here's another one I don't understand. I've know you guys for twenty years, and I've been around you a lot. My observation is that you get angry at David with pretty much the same frequency and intensity as he gets angry at you, but it never seems to occur to you that *you* are bullying or intimidating him...etc."

Similarly, systematic evaluation by an outside observer would quickly reveal the weakness of John's VLE explanation, and if I were one of his close friends I could point out just as many flaws in his assessment:

"So you're saying that Sara was flirting and trying to pursue some kind of inappropriate relationship because she was being friendly and *smiling*? John – your two sisters were standing right beside her, and she was talking to your friends! I was standing in the same circle of conversation and I don't think she was doing anything different than the rest of us – we were *all* being friendly and smiling. You told me once that you have never found the slightest shred of evidence indicating that she has been unfaithful – has that changed? You always say that her friendly behavior and smiles are inappropriate, but I've never been able to understand you when you've tried to explain how you came to this conclusion. And here's another one I don't understand. I've known you guys for twenty years, and I've been around you a lot. My observation is that you are friendly towards other women, and frequently smile at them, but it never seems to occur to you that *you* are pursuing inappropriate relationships....etc."

Systematic evaluation by an outside observer would also reveal the weaknesses of my VLE explanations. In fact, I can think back on the experience and point out a number of obvious flaws myself (now that I am no longer triggered):

"So, you're saying that Charlotte was hurting and humiliating you? Think about the details of her behavior – she was smiling, she was glad to be with you, and there wasn't even the slightest *hint* of taunting, gloating, or trying to prove she's better than you. In fact, she really wasn't focusing on the competition at all – if you think about it carefully, you'll remember that she was hardly even aware of <u>your</u> score. I was there, remember? "Humiliation" seems like a strong word for losing a board game to a friendly opponent, in the comfort of your own living room, with no spectators, no consequences, and a non-competitive atmosphere. Unless there was something else getting stirred up one would think you could just eat some humble pie, acknowledge that you have trouble with scrabble, and then take pride in Charlotte's expertise.

"And let's talk about your reaction to her coaching tips – think about her facial expressions and her voice tones – can you honestly tell me that she was trying to be hurtful? She was very gentle as she offered her tips, and she was constantly encouraging you. I think it's pretty clear she was just trying to help.

"While we're at it, let's talk about your conviction that it was somehow *Charlotte's* responsibility to recognize and fix the problem...etc."

Another piece of the puzzle that helps to explain our gullibility⁴⁰ with respect to VLE explanations is to realize that the central nervous system extrapolates, or "fills in," at a variety of levels. VLE confabulations are what we get when the central nervous system "fills in" at the level of explanations. In the examples discussed above, such as with the split brain experiment when the research investigator asked "Why did you pick the shovel?," there was a "hole" with respect to explanation. And instead of acknowledging "I don't know – there's just a big hole where an explanation should be," the central nervous system VLE tries to fill in the hole with a confabulated explanation *that is actually an extrapolation – an educated guess based on the information that is available*. Interestingly, a wide range of research reveals that our central nervous systems extrapolate, or "fill in holes," at a number of different levels. For example, central nervous system extrapolation is revealed at the level of perception when Gestalt principles (such as "closure") produce perceptual illusions,⁴¹ and central nervous system extrapolation is revealed at the level of cognition when we perceive illusory correlations.⁴²

⁴² Many research studies have demonstrated central nervous system extrapolation in the form of illusory correlations. For the original demonstration and discussion of illusory correlations, see Chapman, Loren, J., "Illusory correlation in observational report," *Journal of Verbal Learning and Verbal Behavior*, Vol. 6, 1967, pages 151-5. For more recent, corroborating research, see Hamilton, David L. & Rose, Terrence, L., "Illusory correlation and the maintenance of stereotypic beliefs," *Journal of Personality and Social Psychology*, 1980, Vol. 39, No. 5, pages 832-845; and Sanbonmatsu, David M.; Kardes, Frank R.; Herr, Paul M., "The Role of Prior Knowledge and Missing Information in Multiattribute Evaluation," *Organizational Behavior and Human Decision Processes*, 1992, Vol. 51, pages 76-91.

⁴⁰ Note that we only seem to be gullible with respect to *our own* VLE explanations. It is usually pretty easy to spot the irrational logic and missing evidence in the VLE explanations of others (unless we have very similar wounds and VLE explanations, in which case we seem to share their blind spots).

⁴¹ Most psychology text books on perception will include discussion of central nervous system extrapolation at the level of perception. See, for example, the discussions of subjective/illusory contour figures and the Gestalt laws of perceptual organization presented in Coren, Stanley; Ward, Lawrence M.; Enns, James T., *Sensation and Perception, sixth edition* (Hoboken, NJ: J. Wiley & Sons), 2004, pages 242-248.

One of the most dramatic examples of central nervous system extrapolation is the filling in of the retinal blind spot. **Figure** ** The retina lives at the back of the eye, and is like the sensor in a digital camera. An image of what we are seeing is focused through the lense of the eye and lands on the retina, where the sensory receptors (rods and cones) react to the light and then send signals that correspond to the image. As illustrated in **figure** **, the nerve fibers from the rods and cones come out of the *front* of these sensory receptors, so that they must then penetrate through to the back of the retina in order to form the optic nerve that travels to the brain. The nerve fibers from all of the rods and cones gather together into a bundle, and then penetrate through to the back of the eye in one place, called the optic disc. In **figure** **, a photograph of the retina, the optic disc is the white/yellow circle just to the left of the center of the picture. The point with respect to this discussion is that the area of this optic disc *does not have any receptor cells*. This means that there is *no input* from the part of the image falling on the optic disc, and the corresponding hole in the visual field is called the retinal blind spot.

If the retinal blind spot were directly represented in our visual perception our view of the world would include a black hole corresponding to the lack of input from the optic disc, as illustrated in **figure** **. However, as we all know, we *do not* perceive a black hole in our visual field, and this is because our central nervous system extrapolates to fill in the retinal blind spot. The central nervous system extrapolator in charge of this function samples the input from the edges of the hole, and then uses this information to make an educated guess regarding what should go in the hole. Charlotte touching up digital photographs on the computer provides a good analogy. If she finds a blemish, such as the unsightly brown patch to the right hand side of this otherwise attractive green lawn, **figure** **, she can sample the input from around the flaw and then fill in the brown spot with this nearby material.

The central nervous system extrapolation to fill in the retinal blind spot can be exposed by the simple exercise described in **figure **(figure and instructions for demonstrating retinal blind spot)**. When the small image on the right side of the figure is completely covered by the blind spot the central nervous system extrapolator fills in the hole with input from the surrounding white background. As you have just observed, when the "hole" is filled in with input from the white background *the image of the butterfly completely disappears!*

In light of the fact that central nervous system extrapolation "fills in the holes" at so many different levels, I am guessing that some kind of central nervous system extrapolator helps to fill in the "holes" that can sometimes make VLE confabulations appear so weak to outside observers.

IX. Good old denial and self deception: I think the last pieces of the puzzle are good old denial and self deception. Most of us do not want to know just how dysfunctional we are (or maybe we do not yet have the *capacity* to deal with knowing the full extent of our dysfunction?). We don't want to see just how often we are triggered, we don't want to see just how many of our perceptions, thoughts, and emotions are implicit memories coming from unresolved trauma, and we don't want to see just how many of our explanations are actually confabulations trying to justify our triggered reactions. The most generous formulation is that we just don't know what to do with all of the data points that don't seem to fit.

So we look away from the clues that tell us something is missing. We look away from the evidence telling us "Something is wrong with this picture." We look away from the data points that tell us something is wrong with the way we understand ourselves and the world around us.

It's amazing how easy it is to be fooled when we are fooling ourselves and we want to be fooled. It's pretty easy to maintain a blind spot when we don't want to see what's hiding in the blind spot and when we don't want to know that we have a blind spot. Gullibility is pretty easy to explain when all of the "players" are on the same team.

X. Negative reactions to the suggestion that we might be triggered: In addition to traumatic content coming forward as "invisible" implicit memory that *feels* true in the present, VLE confabulations "explaining" why the traumatic implicit content is really about the triggers, central nervous system extrapolations "filling in the holes," and our self deception/denial choosing to "look the other way," most of us also have specific, memory-based negative reactions to the suggestion that we might be triggered.

Trauma almost always includes the absence of attunement: Part of the definition of trauma (in our current Wilder/Lehman model) is a situation that exceeds our capacity and/or maturity skills. *An inherent part of this definition for trauma is not having the necessary resources*. If the person who is going through a painful experience has safe adults who are with him, hearing him, understanding him, validating him, relationally connected to him, and caring for him *he will almost never be traumatized*. Therefore, most traumatic memories will include the *absence* of attunement – the *absence* of others who were with him, who were relationally connected to him, and who heard him, understood him, acknowledged his pain, validated the difficulty of the situation he was in, and cared for him.

Unfortunately, this almost universal aspect of trauma causes trouble when it mixes with the subjective experience of traumatic implicit memory and VLE confabulation. Since implicit memory *feels true in the present*, when trauma that includes this component gets triggered, "I'm still waiting for someone to hear me, understand me, acknowledge my pain, and validate the difficulty of the situation I'm in" will *feel true in the present*. And here's where we encounter the problem, because I will want them to acknowledge and validate the *full extent* of my *implicit memory pain*; and I will want them to acknowledge, validate, accept, and agree with my assessment of the situation, *including my perception that the implicit memory pain is actually being caused by the triggers and my VLE confabulations based on implicit memory content transferred into the present*.

When I'm triggered, what *feels* true is that I want someone to hear, understand, acknowledge, validate, and agree with *my transferred implicit memory content and my VLE confabulated explanations*. When others refuse to do this, and instead suggest that I am triggered, it feels mis-attuning and resonates with the "lack of adequate resources" aspect of the original trauma. Implicit memory for *not* being understood, *not* receiving attunement, *not* having my pain acknowledged, and *not* having my assessment of the situation validated promptly comes forward into the present and is transferred onto the person who is suggesting that I might be triggered.⁴³

⁴³ In my experience it has been helpful to very deliberately recognize, acknowledge, validate, and attune to this aspect of the whole scenario. For example, when trying to help someone recognize that his present experience is being affected by trauma that has come forward as implicit memory, I will make comments along the lines of: "I think your pain and your perception of what's happening will make sense as soon as we get all the pieces in place. I really want to validate your sense of what's happening, but I think some of your thoughts and some portion of your pain may be coming from old trauma. If you're willing to try it, I would like to ask the Lord to help us find any memories that might be contributing. I'm guessing that the full extent of your pain and your assessment regarding the situation will both make

Specific content that opposes recognizing and taking responsibility for triggering: Many traumatic experiences include being actively blamed, accused, and invalidated, as opposed to being heard, understood, validated, attuned to, and believed. For example, when a child is molested by a close family member, the rest of the family is often unable/unwilling to deal with the many painful consequences of acknowledging this horrible reality, and so attack and blame the child instead. Sadly, we have heard many stories such as, "When I told Mom that grandpa molested me, she washed my mouth out with soap and told me I'd get a good spanking if I ever said anything like that again," or "When I told Dad that my brother forced me to have sex with him, he told me it was my fault for wearing the wrong clothes."

This sadly common component of trauma causes even more trouble when it mixes with the subjective experience of traumatic implicit memory and VLE confabulations. As the original trauma is *feeling true in the present*, and VLE confabulated explanations are *focusing on people in the present*, suggesting the possibility that the person might be triggered usually activates any "blamed, accused, invalidated" component of the original experience. When this happens, the implicit memory perception of being blamed, accused, and invalidated immediately comes forward into the present, and associated VLE confabulations will focus on whoever is suggesting the possibility that old trauma might be getting stirred up, it usually *feels compellingly true* that she is blaming, accusing, and invalidating me: "Oh, yeah, right! Everybody else is innocent, and the real problem is that I'm triggered – if it wasn't for all my triggering and dysfunction everything would be just fine! If we blame Karl everybody else can just go on ignoring their stuff...etc." (Heavy sarcasm intended).

Furthermore, many of us have had experiences where it was not safe to acknowledge doing something wrong. Even good and loving parents can get intensely triggered, and have episodes where they over-react to something their child has done. For example, a small child might disobey some household rule, and as a result break something that is especially precious to the parent. When Dad discovers the broken treasure he asks "who did this?," the child honestly acknowledges "I did," and then Dad grabs the child, shakes her, and screams at her for being careless. If the person had experiences where it was not safe to honestly acknowledge her faults, then suggesting the possibility that she might be triggered (indirectly asking her to acknowledge that her woundedness is contributing to the problem) can activate this traumatic content. To the extent that this is happening she will feel defensive and unsafe, even when the suggestion is made carefully and gently.

XI. The importance and difficulty of neutralizing traumatic implicit memory and VLE confabulations: Let us summarize with respect to both the strategic importance and the difficult challenge of neutralizing traumatic implicit memory and VLE confabulations:

•Unresolved traumatic memories powerfully affect our perceptions, thoughts, emotions, abilities, and choices.

•The unresolved traumatic content comes forward as implicit memory, so that it feels true in the present, and is not recognized as coming from underlying unresolved memories.

sense in the context of the original trauma." Also, even though I *can't* honestly agree with every aspect of his *interpretation* of the experience, I *can* be with him, hear him, understand him, care for him, and validate his pain, *and it is very helpful to offer these*.

•Our VLEs come up with "explanations" that focus on the triggering stimuli in the present, our central nervous system extrapolators fill in a few more of the holes, and good old denial and self deception take care of anything that is left over.

•The end result is that we usually believe the VLE explanations, accept the implicit memory content as true in the present, and blame the triggers as if they are the original source of the implicit memory content from the underlying traumatic memories; and we try to solve the problem by loading more informational truth into non-traumatic memory files and by trying to manage, control, or change the triggering stimuli in the present.

•Unfortunately, you cannot resolve the toxic content carried in traumatic memories by loading more informational truth into non-traumatic memory files, or by focusing on the triggering stimuli in the present; and this means that our *usual* responses will *not* resolve the true, underlying source when we are dealing with problems caused by traumatic memory content.

•Suggesting the possibility of triggering can stir up a variety of negative reactions that make it much more difficult to recognize and acknowledge any triggering and VLE confabulations that are present.

•If we perceive that a *person* is responsible for the triggering situation, we will only feel heard, validated, safe, and ready for reconciliation if he takes full responsibility for the implicit memory traumatic content.

•Furthermore, if we are triggered by some aspect of our interactions with the Lord, then all of the above dynamics will result in traumatic implicit memory content and VLE confabulations undermining our relationship with Him (such as I described with respect to transferring content from my 2 year old separation trauma onto the Lord).

Putting all this together, we can see both how important and how difficult it is to neutralize our traumatic implicit memory and VLE confabulations.

One more reason: As an interesting addendum, I want to mention one more reason why it's important to resolve our traumatic memories. As people age, the frontal lobes are especially affected, and the defenses we use to manage our unresolved stuff are progressively weakened. As our coping mechanisms weaken, we become progressively more reactive and dysfunctional *unless we also heal and mature as we age, to offset our weakening defenses.* This phenomena is currently being highlighted by aging veterans who are developing PTSD after 50+ years of minimally impaired functioning. For example, Dr. Deirdre Johnston noticed a large number of combat veterans from WWII and the Korean war who had just recently developed PTSD in conjunction with progressing dementia. When she examined several of these cases more carefully, the information she gathered revealed that these men had displayed *subtle* evidence of unresolved trauma through the decades since their combat experiences, but that they had been able to raise families, maintain employment, participate in their communities, etc. with minimal functional impairment. Apparently, they had been able to effectively manage their unresolved traumatic memories for these many years. However, these men began to develop full blown, disabling PTSD as age related dementias eroded the strength of their psychological coping tools.

The elderly who have spent their lives maturing and cleansing their minds and spirits are an inspiration. When these people experience dementia it reveals the beautiful truth that their grace, humility, maturity, courage, gentleness, etc. go all the way to the core. In contrast, the elderly who have spent their lives clinging to their defenses and blaming others are a warning. When

these people experience dementia their underlying immaturity, woundedness, and dysfunction are exposed. The short summary is this: As you age, you will increasingly walk around in your psychological and spiritual underwear. Do you want to wash that underwear before your family, friends, and neighbors have to see it?

XII: Neutralizing traumatic implicit memory and VLE confabulations: At this point, the reader is hopefully asking: "So what do we do? *HOW* do we expose and neutralize our traumatic implicit memory and VLE confabulations, so that they won't continue to disrupt our lives and relationships?"

A. *I* need to take responsibility for *MY* triggered traumatic content and VLE confabulations: One of the most strategic points in this whole endeavor is for each of us to take responsibility for exposing and neutralizing *OUR OWN* triggered traumatic content and VLE confabulations.

Unfortunately, most traumatic memories are childhood memories, and part of what they carry is the child or infant maturity we were operating out of at the time of the original experience. When these memories get triggered, to the extent that we blend with the ego state from inside the memory package we regress to the maturity level carried in the memory. Furthermore, as described above, the suggestion that we might be triggered often activates a second layer of negative implicit memory content. Putting all of this together: when we are triggered and someone tries to point this out to us, we often respond by taking a defensive, adversarial stance from a place of infant or child maturity. As is normal for infant and child maturity, we assume it's somebody else's job to do most of the work, so that the task remaining for us will be relatively easy (difficulty appropriate for an infant or child). We demand that they "prove it" before we acknowledge our triggering and VLE "explanations," and we fight them every step of the way. When we do finally acknowledge our traumatic implicit memory and the ways it comes forward into our present lives, we expect others to provide the time, energy, and finances for the emotional healing to resolve the trauma. For a variety of reasons, taking this adversarial stance from a place of infant or child maturity usually does not turn out well.

In contrast to this "does not turn out well" approach, we can deliberately, aggressively and proactively embrace the responsibility and take the initiative with respect to this life-giving challenge. Instead of demanding that others "prove it" before we even acknowledge our triggering, expecting them to carry most of the load, and then fighting them every step of the way, we can take responsibility for our stuff. As described above, one of the most problematic points in this whole endeavor is the extreme difficulty of receiving truth from others regarding our triggering and VLE confabulations – our tendency to feel invalidated and react with outrage when anybody suggests the possibility that we might be triggered. One of the most valuable aspects of embracing responsibility for exposing and neutralizing our own stuff is that this side steps the complicated hornet's nest of having to receive this difficult truth from others. Furthermore, embracing responsibility for exposing and neutralizing our own stuff helps us respond constructively when others (helpfully?) volunteer the suggestion that we might be triggered. In my own experience, I know that my repeated, deep resolutions to vigorously pursue exposing and neutralizing my triggering and VLE confabulations have helped – when Charlotte suggests that I might be triggered, and the negative reactions described above well up inside (urging a variety of non-relational responses), I can feel that my commitment to taking responsibility for my own stuff helps me *choose* to listen to her and consider the probability

that she is right.44

Men, if you want to be courageous and heroic in serving your wives, your children, your friends, and your communities, then be courageous and heroic in the battle to expose and neutralize your triggered traumatic content and VLE confabulations. Women, if you want to be courageous and heroic in serving your husbands, your children, your friends, and your communities, then be courageous and heroic in the battle to expose and neutralize your triggered traumatic content and VLE confabulations. Believers, if you want to be courageous and heroic in serving the Lord, then be courageous and heroic in the battle to expose and neutralize your triggered traumatic content and VLE confabulations. Believers, if you want to be courageous and heroic in serving the Lord, then be courageous and heroic in the battle to expose and neutralize your triggered traumatic content and VLE confabulations, *so that we can foil the enemies schemes for division, and fulfill the Lord's plan for thriving relationships, healthy community, and a unified, relational church that will take His love to the World.* ⁴⁵

PLEASE don't let your VLE misuse this information: An especially important point in the larger "take responsibility for your own stuff" discussion is "PLEASE don't let your VLE misuse this information." Your VLE will want to use this information as a new, powerful resource in the never-ending effort to "explain" why the problems in front of you are always somebody else's fault. In most difficult situations, all the people involved (*including you*) will be at least subtly triggered, and your VLE will want to use this information to help "explain" why the *whole* problem is being caused by the other people's triggering, VLE confabulated explanations, immaturity, etc. For example, if you and your wife are *both* contributing traumatic implicit memory and VLE confabulations to the mix, but you focus on *her* triggering and confabulated explanations, her experience will be that you are using this material to defend yourself and to blame and invalidate her. PLEASE don't let your VLE use this information to justify your triggered implicit memory and confabulated explanations by blaming and/or invalidating others. If you indulge in this subtle but deadly trap you would be better off not knowing about implicit memory, the VLE, and central nervous system extrapolation.

Just so you won't beat yourself up when you fail, I'll confess that I have already caught myself doing this on a number of occasions, and I'm pretty sure you will also occasionally fall into this trap (no matter how hard you try to avoid it). The key is to be deliberately watching for this problem and to quickly surrender it whenever you become aware of it.

The ideal is for all of the people involved in a given situation to understand this material, and for each person to be *voluntarily* embracing the humbling challenge of exposing and neutralizing his own traumatic implicit memory and VLE confabulations. It has been an incredible gift to Charlotte and I to be able to do this (at least most of the time) in our marriage. However, there will be many situations where one or more players are not yet able/willing to do this. In

⁴⁴ Once we have gotten some practice with recognizing and acknowledging our stuff, and have strengthened our capacity for shame, we can take the especially courageous step of *inviting* others to help us in the narcissistically mortifying process of exposing our triggered traumatic content and confabulated explanations.

⁴⁵ You may think I'm being melodramatic in my use of "courageous" and "heroic," but if you take me up on this challenge you'll discover that I'm not overstating my case. In fact, once you have gotten some practice with recognizing and acknowledging your stuff, and have strengthened your capacity for vulnerability, if you are feeling especially courageous you can take the step of *inviting* others to help you in the narcissistically mortifying process of exposing your triggered traumatic content and confabulated explanations.

these difficult scenarios, it can be helpful to share this information, *but then be especially careful to lead by example*. If you want to be especially humble, heroic, and helpful, spend the first several months after introducing this material repeatedly owning your own stuff *without even hinting that the other person has at least as much triggering and VLE confabulation as you do*. This will be *extremely* difficult for most people, but if you can do it it will also be *extremely* helpful.

B. Exposing and resolving the underlying traumatic memories: Obviously, an important part of taking responsibility for your traumatic implicit memory and VLE confabulations is to take responsibility for the ongoing, long term endeavor of exposing and resolving the underlying memories that are the source of the traumatic implicit content that comes forward when you get triggered. In parts IV & V we will provide a thorough discussion of this aspect of neutralizing traumatic implicit content and VLE confabulations.

C. Recognizing and acknowledging "invisible" implicit memory and VLE confabulations, and then choosing based on truth: Each specific traumatic memory that gets resolved is a step forward, but none of us will be finished with *all* of our traumatic memories any time soon. In the mean time, we need to embrace the challenge of at least partially neutralizing our implicit memory and VLE confabulations by recognizing and acknowledging them, and then once these previously "invisible" phenomena have been exposed, making behavioral choices based on the truth carried in our non-traumatic memory files.

Note that recognizing and acknowledging our traumatic implicit memory and VLE confabulations is also a necessary prerequisite for exposing and resolving underlying trauma, since we can't even ask the question "should I deal with traumatic memories?" until we have recognized that we are triggered, and then also acknowledged and surrendered the VLE confabulations arguing for other explanations.

The bad news is that we do not have space in this seminar for a thorough discussion of how to recognize and acknowledge our traumatic implicit memory and VLE confabulations. The good news is that we *will* present the "help you recognize when you're triggered" tool that many find to be both the most valuable and the easiest to use. Furthermore, additional discussion regarding how to recognize and acknowledge our triggered traumatic memories and VLE confabulations is available in our essay "Triggered traumatic content and verbal logical explainer (VLE) confabulations."⁴⁶

Another piece of good news is that it helps to know about the memory-anchored negative responses described above. For example, I have often felt blamed, accused, and invalidated when Charlotte has suggested that I might be triggered, but I recognized and understood this second layer of triggering as it welled up inside of me, and I could feel that this understanding helped me choose to respond constructively even though my subjective experience was an intense implicit memory perception of being blamed, accused, and invalidate, and an equally intense impulse towards angry, defensive retaliation.

Watch for loss of access to relational connection circuits: We have been created to be

⁴⁶ Lehman, Karl D., "Triggered traumatic content and verbal logical explainer (VLE) confabulations," "About Our Theophostic®-based Emotional Healing Ministry/Therapy" section, *Documents* page, <u>www.kclehman.com</u>, 2008.

relational beings – we have been created to be in relationship with God and with each other. Our minds and spirits have been created to *desire* relationship and to *function best* in relationship. As described in Part II, the Lord has actually designed specific circuits in our biological brains to serve this longing and need for connection, and when these brain circuits are functioning as designed our spontaneous experience will be to feel relationally connected and to feel the desire for connection. We will perceive others as relational beings, we will be aware of others' true hearts, we will feel compassionate concern regarding what others are thinking and feeling, we will experience the presence of others as a source of joy, and we will be glad to be with them.

As also discussed in Part II, there are problems that can cause us to lose access to these brain circuits, and when this happens our spontaneous experience will include the *absence* of feeling relationally connected (we won't even *want* to be connected). We will *not* perceive others as relational beings, we will *not* be aware of others' true hearts, we will *not* feel concern/compassion regarding what others are thinking and feeling, and we will *not* be glad to be with them or experience their presence as a source of joy. Furthermore, when we lose access to our relational connection circuits *in the context of being upset with a specific friend or family member*, instead of perceiving that person's presence as an emotional resource we will perceive him as the problem and as an adversary.

One of the problems that can cause us to lose access to our relational connection brain circuits is dismissive attachment. A large part of dismissive attachment is learning to live without access to one's relational connection circuits, and to the extent that a person has dismissive attachment he will be going through life with these circuits "off line." Experiencing painful emotions that directly overwhelm our emotional maturity skills is another problem that can cause us to lose access to our relational connection circuits. However, the most common problem causing us to lose access to our relational connection circuits is traumatic memories being activated. As described earlier, if the unresolved content carried in a particular traumatic memory includes loss of access to your relational connection circuits, then these circuits will go off line every time this particular memory gets activated. Furthermore, I've found it to be much easier to recognize and acknowledge that I've lost access to my relational circuits than to recognize and acknowledge that I'm triggered. Even after years of practice, I still find it especially difficult to acknowledge that I am triggered – even when I am just talking to myself, I still experience intense internal resistance to acknowledging my triggering and VLE confabulations. However, I have been pleasantly surprised to discover that this resistance has been almost entirely absent when it comes to recognizing and acknowledging that I have lost access to my relational connection circuits.

Not every traumatic memory carries this problem, so being triggered does not *always* cause this temporary loss of relational connection circuits; and, as just mentioned, there are other causes for loss of access to these circuits, so loss of access to your relational connection circuits does not *always* mean you are triggered. However, in my personal experience the overlap is about 95% – in the vast majority of cases, if I'm triggered my relational circuits are off line, and if I've lost access to my relational connection circuits I'm triggered. I would encourage you to evaluate this overlap for yourself, and if you are one of the people with a very strong correspondence (like myself), then learning to recognize when your relational connection circuits go off line can be one of your most valuable tools in recognizing when you're triggered.

<u>Relational connection circuit check-list</u>: Whenever you are upset, ask yourself the following questions:

Do I feel connected to _____ (fill in names of the people involved in the problem)?

Do I feel desire to be connected to _____ (again, fill in names of the people involved)?

Do I perceive them as relational beings?

Am I aware of their true hearts?

Do I feel concern/compassion regarding what they are thinking and feeling?

Do I perceive their presence as a source of joy (as opposed to a problem to be solved or a resource to be used)?

Am I glad to be with them?

And as you review these questions it's important to note that they are *not* asking whether you know what you *ought* to think and feel, whether you know how you *ought* to act, or whether you are aware of the kind of consequences that might ensue should you act on your hurtful, non-relational impulses. All of these protective, higher level brain functions often stay at least partially on line (for example, they will often enable you to make better choices regarding your outward behavior). Rather, these questions are asking about the thoughts, emotions, attitudes, and impulses towards other people that come forward *spontaneously* and *involuntarily*, and that *feel* true.

If the answers to these questions are "no" then your relational connection circuits are off, and if these circuits are off you are probably triggered. At the very least, noticing that you have lost access to your relational connection circuits should prompt you to ask: "Am I triggered?" *with the assumed answer being "Yes" until proven otherwise*.

D. Re-establishing access to your relational connection circuits: One of the most damaging effects of getting triggered is loss of your relational connection circuits, and then the ways in which this loss affects how you relate to all those around you. Conversely, if you are in any kind of difficult situation and triggered traumatic memories have caused you to lose access to your relational connection circuits, one of the most helpful things you can do to limit the negative impact of your triggering is get them back on line. *Reestablishing access to these circuits will actually enable your brain to function more effectively*. Especially with respect to *relational conflicts*, EVERYTHING will turn out better and flow more easily once you get them back on line. For example, in my experience *surrendering* my VLE confabulations and *acknowledging* my triggering – one of the steps that can be especially difficult – gets much easier if my relational connection circuits are on line and functioning properly.

Another piece of fascinating brain science provides further understanding of why it is *so* costly to lose access to these circuits and *so* important to get them back on line. Dr. Sacks describes a patient who developed a particularly interesting form of color-blindness. After an injury to the part of his brain responsible for processing color, this patient not only lost the ability to see color in the present, he also lost the ability to think in color, he lost the ability to dream in color, and he even lost the ability to *remember* in color. He could remember the fact that bananas are yellow, but he could no longer recall the subjective experience of actually *seeing* yellow, and all of his memories came forward in black and white. *When he lost the part of his brain responsible for processing color the subjective experience of color was removed from every aspect of his life*.⁴⁷

⁴⁷ Sacks, Oliver. An Anthropologist on Mars. (New York: Vintage Books) 1995, pages 3-41.

My perception is that a similar phenomena occurs with our relational connection circuits. When we lose access to our relational connection circuits we temporarily lose the subjective experience of relational connection from every aspect of our lives. We not only lose the feeling of being relationally connected to those around us in the present, we also lose the ability to think relationally, and we even lose the relational connection component of our memories.

The memory aspect of this picture is especially important. As discussed in Part II, positive relational connection experiences accumulate in our memory banks, and the positive relational connection memories that accumulate in these accounts play a vitally important role in our psychological and spiritual development. For example, we develop secure attachment as we accumulate a large pile of memories for experiences where our caregivers are emotionally available, correctly understand our needs, attune to us, and respond appropriately to the unique problems we bring them;⁴⁸ and we develop a strong, stable baseline of joy *that goes with us even into difficult situations* as we accumulate a large pile of memories for experiences where our caregivers are glad to be with us.

However, when we lose access to our relational connection circuits we temporarily lose access to the resources in all of our relational connection memory bank accounts. It's like the banks are closed and all the ATM machines are temporarily out of service. To the extent that our relational connection circuits are off line we can't *feel* the relational connection memories that are the source of secure attachment, we can't *feel* the "glad to be with you" relational connection memories that accumulate to build the foundation of joy we ideally stand on as we address every other aspect of our lives, we can't *feel* the relational connection memories that accumulate as the subjective, intuitive sense of trust and safety in our relationships with our spouses, family, and friends, and we can't *feel* the relational connection memories of perceiving the Lord's presence as a person. The left sides of our brains will be able to remember these past experiences as *information*, but the subjective, intuitive, emotional right sides of our brains will not be able to *feel* any of the resources in these relational connection memory accounts.

Yet another asset of focusing on our relational connection circuits is that it's often possible to reestablish access to our relational connection circuits even in situations where we do *not* have the time, emotional space, or other resources necessary for finding and permanently resolving any underlying trauma contributing to the problem. Therefore, part of taking responsibility for our traumatic implicit memory and VLE confabulations is taking responsibility for deliberately reestablishing access to our relational connection circuits.

Fortunately, the Lord knows that we often lose access to these circuits, and He has provided a plan for getting them back on line. As discussed in Part II, He has designed our brains so that perceiving someone *with* us in our pain, perceiving that this person is glad to be with us, and feeling that this person hears, understands, and empathizes with us in our pain *will bring our relational connection circuits back on line*. If there are people in our community who know how to hear us and be *with* us in this way (attunement), then sharing our upset thoughts and emotions with one of these friends can do the job. For those of us who experience the Lord as a personal presence, we can also do this with Him; and this is especially good news, since He is always available and able to do this. In fact, there are times when it seems like the Lord is the

⁴⁸ Those of you with especially good memories will recall that the development of secure attachment also requires the accumulation of many memories for experiences where relationships were successfully repaired after being temporarily damaged by conflict.

only person who can hear us, understand us, and be with us in this way.

Sometimes it can be difficult to do this, and the complete discussion regarding all the possible difficulties would make a nice week long seminar. However, there's a simple intervention that's often effective.

1.) Recall previous experiences of positive connection with the Lord: Think about past positive experiences with the Lord – experiences where you felt connected to Him and glad to be with Him.

2.) Deliberately appreciate: Deliberately focus on appreciating His presence and the way He cared for you in these past experiences. As will be discussed in Part V, deliberately appreciating the Lord's goodness and how He has cared for you will actually change your brain as part of preparing your brain, mind, and spirit for connecting with Him.

3.) Invite Him to be with you: After deliberate appreciation has prepared your brain, mind, and spirit for connecting with the Lord, invite Him to be with you, especially *in* any negative thoughts and emotions that still remain, and ask Him to help you perceive His presence.

4.) Open your heart to Him: Look into your heart and identify the thoughts and emotions you find there. NOT the thoughts and emotions you know you *ought* to have, but the thoughts and emotions that are actually there. Once you identify what's in your heart, describe it directly to Jesus as clearly, honestly, vulnerably, and humbly as possible.

To the extent you perceive that the Lord is *with* you in your negative thoughts and emotions, and to the extent it feels true that He hears you, understands you, and is glad to be with you, this will bring your relational connection circuits back on line.

And when you *feel* connected to any other people involved in the situation, when you *want* to be connected, when you perceive others as relational beings, when you're aware of others' true hearts, when you feel compassionate concern regarding what others are thinking and feeling, when you perceive the presence of others as a source of joy, and when you are glad to be with them *I guarantee that you will be more able to deal with any relational conflict contributing to the problem, and that the damaging effects of your triggering will be greatly reduced.*

These insights regarding relational connection circuits also have tremendous implications when trying to help another person who is triggered. One especially strategic application is: "When trying to help a person who is triggered, *make sure to attune to him and help him get his relational circuits back on line before trying to suggest that triggering could be contributing to his distress.*" As Charlotte and I have examined this point in our relationship, we have noticed that things go MUCH better if we truly attune to the other before addressing the question of triggering; and we have also noticed that things consistently go badly when we do *not* start with attunement.

For example, on some occasions when I get triggered and lose access to my relational connection circuits, Charlotte feels spontaneous compassionate concern for what I am thinking and feeling *and she is glad to be with me even though I am upset and non-relational*. In these situations she listens to me, understands my internal experience, empathizes with me, validates my pain, and cares for me.⁴⁹ As I *feel* that she is *with* me, that she is glad to be with me, and that she hears me, understands me, validates me, and cares for me *my relational circuits come back on line*; and then *after* I have regained access to my relational connection circuits, she gently suggests that I might be triggered and offers to pray with me to address this possibility. In these situations, even though I can feel the desire for her to also agree with my interpretations (VLE confabulations), and even though I feel a wave of disappointment and frustration when she does not, her attunement usually means a lot more than her lack of agreement. Furthermore, as described above, regaining access to my relational connection circuits gives me much stronger emotional resources with which to deal with my disappointment and frustration. When Charlotte points out my triggering *after* first attuning to me and helping me get my *VLE confabulations, and acknowledge my traumatic implicit memory*.

In contrast, sometimes when I get triggered and lose access to my relational connection circuits Charlotte feels like I am blaming her, or at least that there is a mess to be cleaned up, and she often tries to get me to recognize and acknowledge my triggering as part of defending herself and/or as part of cleaning up the mess. In these situations she is trying to manage me, as opposed to truly attuning to me. Furthermore, when we look at these situations carefully we discover that she is also triggered and that she has also lost access to her relational connection circuits. When she is triggered and non-relational, and is trying to get me to recognize and acknowledge my triggering as part of managing me, *the "not heard, not understood, not validated, not cared for" aspect of the original trauma gets intensely triggered and things quickly go from bad to worse.*

More good news is that we have found these insights to be very valuable even in the situations where one of us gets triggered by the other being triggered and non-relational, so that we both end up triggered and without access to our relational connection circuits. For example, let's say (just for the sake of this example) that Charlotte is triggered and non relational, I feel she is blaming me for her traumatic implicit memory pain, this triggers me so that I lose access to my relational connection circuits, and my immediate impulse is to defend myself by making sure she recognizes and acknowledges how (at least) the majority of her distress is really coming from underlying traumatic memories. I can pull this whole situation out of the fire if, at this point, I remember these insights regarding relational connection circuits. First, I remember to start with attunement and helping her regain access to her relational connection circuits, and therefore stop myself before pointing out the evidence indicating she is triggered. Then, when I try to attune to her and realize that the ingredients for attunement are not present in my heart (for example, I am not glad to be with her), and when I notice that my immediate impulse was to become defensive, I realize that I am also triggered and have lost access to my relational connection circuits (if I have any doubts, I can take a moment to confirm this by going over the check-list). At this point I go through the exercises to get my relational circuits back on line, and then after regaining access to my relational connection circuits I attune to Charlotte and help her regain access to hers. Finally, with these pieces all in place, I can address Charlotte's triggering with a much greater chance of success – I gently suggest that she might be triggered,

⁴⁹ For those of you who are trying to keep track of all the concepts, "feels spontaneous compassionate concern for what I am thinking and feeling" and "is glad to be with me even though I am upset and non-relational" indicate that Charlotte is maintaining access to her relational connection circuits, and "listens to me, understands my internal experience, empathizes with me, validates my pain, and cares for me" = initiates attunement.

point out the clues that support this, and offer to pray with her.

Practical thoughts/tips regarding the relational connection circuits check-list:

• When using the relational connection circuits check-list, it's important to remember that the desire for someone to see me and attune to me is the one relational connection channel still open even when I am otherwise isolated on a negative emotion neurological island. Therefore, if I am asking "do I feel desire to be connected to Charlotte? Do I experience her presence as a source of joy? Am I glad to be with her?" *in the context of imagining Charlotte attuning to me*, I can get "yes" answers even though I have actually lost access to my relational connection circuits. When using the relational connection circuits check-list, it is important to answer the questions *while either experiencing or imagining the other person not attuning to you*.

Practical thoughts/tips regarding the exercises to get relational circuits back on line:

- When talking to the Lord about your pain, it is important to focus on *yourself*, especially focusing on the painful thoughts that feel true and the negative emotions you are experiencing. Focusing on the person(s) you are upset with, and describing to the Lord all the reasons why they are bad and wrong, tends to be much less productive.
- It can be important to tell the Lord about your anger, as part of feeling that you are getting to express all of your negative emotions and feeling that the Lord is hearing you, but in most situations it is helpful to then move from talking about your anger to talking about your pain. There are some exceptions, but in most situations we use feeling anger and talking about anger as a defense to protect ourselves from feeling more painful negative emotions, such as shame, powerlessness, sadness, despair, etc.
- Choosing to indulge in self pity and/or bitterness can block receiving attunement from the Lord (or any one else), and thereby block regaining access to your relational connection circuits.⁵⁰
- When I use these exercises, I also find it helpful to keep reminding myself that my goal is to perceive the Lord's presence, tell Him about my pain, and to feel that He hears me, understands me, and is with me. My goal is *not* to fix the problem that is upsetting (triggering?) me, or even to find and resolve the underlying trauma. My goal is to perceive the Lord's presence, tell Him about my pain, and *receive His attunement* so that I can get my relational connection circuits back on line.
- Even though my goal is not to do the whole job of working through underlying memories, it is still helpful to be aware of the possibility that triggered underlying trauma may be contributing to the upset. In my experience, this understanding helps with finding the right words to express myself to the Lord. If I am trying to make my words make sense/fit into the present situation, but some portion of the upset is coming from old memories, I will resist the words that most accurately express the painful thoughts and emotions that are *feeling* true. And my experience is that I am most likely to *feel* that the Lord hears me, understands me, and is with me when I get the words that most accurately express my pain. If I am insisting on

⁵⁰ *For discussion or self pity and bitterness, and especially discussion of how to surrender them, see "Judgments and Bitterness as Clutter that Hinders Prayer for Emotional Healing," and "Deadly Perils of the Victim Swamp: Bitterness, Self Pity, Entitlement, and Embellishment" on the "About our Theophostic®-based ministry/therapy" page of www.kclehman.com.

words that make sense in the present, and therefore also resisting the words that actually feel true, this seems to hinder my ability to receive the Lord's attunement. Even when I'm not trying to do the whole job of working through the underlying trauma, if I am aware that the upset could be coming from old memories then I seem to be much more able to recognize and accept words even when they don't seem to fit/make sense in my present situation.

This point especially makes sense if I formulate the situation as "I need to feel and receive the Lord's attunement from *inside* any memories that are being triggered." If some significant portion of the upset is coming from old memories, *but I am resisting the words that feel true from inside the memories*, then to the extent that I am blended with the experience of being inside the memories I will not feel heard or understood, *and this will directly interfere with feeling and receiving the Lord's attunement*.

• When I use these exercises I often jump right to inviting the Lord to be with me in my pain, asking Him to help me perceive His presence, and then talking to Him about my thoughts and emotions. My experience is that I usually perceive His presence immediately, and it feels like He's listening, but I don't feel emotionally connected to Him until my relational circuits come back on line. I think maybe I have had enough practice with inviting Him to be with me in my pain and perceiving His presence that I can jump right to this without needing the positive memory and appreciation first. When I'm in distress it certainly feels easier to go right to telling Him about my pain (and feeling heard and understood), than to try to do positive memory and appreciation exercises when I'm upset (and not feeling at all positive or appreciative).

Also, when I do the positive memory and appreciation exercises I am usually calmed down, with my relational circuits already back on line, by the time I *feel* appreciation and *feel* reconnected with the Lord. As I'm thinking more about this now, to some extent it's like two alternative tools as opposed to two parts of the same tool. And at least some of the time, especially when I'm really upset and there's no one with me to coach me through the appreciation exercises, I find it much easier to go right to inviting Him to be with me and telling Him about my pain. In these situations, it feels like the experience of perceiving His presence with me and feeling like He is hearing me and understanding me is immediately satisfying (even before I feel emotionally connected to Him), as opposed to the positive memory & appreciation intervention that requires a transition that can be hard to make when I'm especially upset.

• Finally, in situations where I am having an especially difficult time getting my relational circuits back on line, I put both of these tools together. This can take a significant amount of time and energy, especially if I am in a foul mood and the appreciation exercise is particularly challenging; but there are situations when taking the time and energy to do both, even though it's difficult, is really worth it.

XIII. Conclusions: In my personal experience with applying these principles,

- recognizing, acknowledging, and taking responsibility for my traumatic implicit memory and VLE confabulations helps me choose righteous behavior, even before anything *feels* different.
- recognizing that I have lost access to my relational connection circuits, and then choosing to take deliberate steps to get them back on line, has dramatically reduced the negative effects of my traumatic implicit memory and VLE confabulations.
- Recognizing and acknowledging my traumatic implicit memory and VLE confabulations opens

the door to the possibility of finding and resolving the underlying traumatic memories. Until I recognize and acknowledge my traumatic implicit memory and VLE confabulations I am not even asking the question: "Should I deal with underlying memories?"

- When I am able to identify the underlying traumatic memories, the moment the pieces all come together so that it *feels* true that my pain is really coming from the memories, *all the negative thoughts and emotions I had transferred onto the other person drop off of him or her*. For example, it no longer feels true that bad Charlotte is causing my pain by beating me and making insensitive comments, *and I once again perceive her as my ally instead of the source of my pain*. I may still feel the negative thoughts and emotions from the trauma, but it no longer feels true that *Charlotte* is causing them.
- And when I successfully work through a traumatic memory, this particular package of toxic content is *permanently* resolved so that it will *never again cause trouble*.
- When I'm trying to help another person who is triggered, *Starting* with attunement *before* suggesting the possibility of triggering makes it much easier for the other person to surrender VLE confabulations and acknowledge traumatic implicit memory.

Traumatic implicit memory, VLE confabulations, and relationships: Finally, I would like to make several comments specifically regarding traumatic implicit memory, VLE confabulations, and relationships.

- As Charlotte and I have applied these principles we have experienced steadily increasing joy in our marriage. *Relational connection is the source of joy, relational conflict breaks relational connection, and applying these principles to resolve and prevent relational conflict will therefore result in much more joy.*
- As mentioned earlier, God has created us to be relational beings, and this seems to be one of the most important aspects of His plan for us. The enemy, not surprisingly, therefore makes a special effort to attack relationships. *Understanding and applying these principles can help us to outwit the devil's schemes to disrupt the Body of Christ through relational conflict*.
- Our most important relationship is our relationship with the Lord, and therefore *the* most important point regarding all of this is how it applies to This relationship. The most costly effect of traumatic implicit memory content and VLE confabulations is injury to our relationship with the Lord, and *the most important reason to understand and apply these principles is to remove blockages that hinder our hearts from perceiving and connecting with Him.* Understanding and applying these principles in our relationship with the Lord will help us outwit the devil's schemes to disrupt This relationship that God desires to be the foundation and center of our lives.