

# THE HEALING POWER OF LABYRINTHS

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## THE HEALING POWER OF LABYRINTHS

A functioning memory is the foundation of happiness and mental health. The reason why we know these shapes and lines are letters, these groups of letters are words, and these words have meaning is because our brains are constantly accessing information from when we encountered them before. Memories allow us to interpret the world around us before we react to it. However, before our memories can be used, they have to be processed. Memory processing occurs during the rapid eye movement (REM) stage of sleep cycles, when the brain picks out important information from our experience and discards unnecessary details. Processed memories are then stored in a neural net, connected to other processed memories. But some experiences, such as natural disasters or sexual assault, can be so distressing that they overwhelm the brain's processing mechanisms — these unprocessed memories undermine the root of mental health and happiness. Since they are unprocessed, these experiences are stored unfiltered, meaning that the brain recalls intense images and emotions when the memory is evoked, rather than helpful information. Unprocessed memories can completely alter the way our brain interprets the world around us, and can cause PTSD and a wide variety of psychological conditions. In 1987, Francine Shapiro discovered a simple yet remarkably effective way to help the brain process memories by using controlled eye movements. After recognizing that the eye movements mimicked patterns from REM cycles, she published studies about her treatment, which became one of the first available therapies for PTSD, and has been adopted by millions of clinicians worldwide to treat many psychological conditions. Her therapy, called Eye Movement Desensitization and Reprocessing (EMDR), also works with many other forms of bilateral stimulation, such as alternating taps between legs or playing a sound in one ear and then the other. Labyrinths have been used both to represent one's journey with EMDR, and as a direct practice of the therapy.

Labyrinths have existed across cultures and time, and served a variety of purposes. In ancient Egypt, a labyrinth structure with 12 courts inside served as a central structure and celebration of their kings and gods. In Greek mythology, a labyrinth was used to trap the ferocious Minotaur. A labyrinth symbol called the Taupat represents mothers and their children to the Hopi Native American tribe, and the Tohono O'Odham nation use a labyrinth called "the man in the maze" to represent the journey to find meaning in life. Recently, labyrinths have shown a resurgence in unexpected places. You can find them in churches, hospitals, and even prisons. The use of labyrinths in new places is a direct nod to the ways that labyrinths can be used as a form of EMDR towards better mental health.

Inspired by Christo's and Jeanne-Claude's *Running Fence*, Andy Goldsworthy's *Rivers and Tides*, and the labyrinth on Bernal Hill, I decided to create my own labyrinths. I employed Goldsworthy's process of creating art that only exists for a short period of time in my method of creating a new labyrinth every day, and taking it apart in the night time. I built my labyrinths out of 2,208 bricks, laid in linear paths which I designed based off of repetitive patterns and other labyrinth designs I had come across. One labyrinth is open for the audience to walk upon, as an invitation to meditate and experience the healing effects of labyrinths.

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Labyrinths have been a staple of my life since I was in elementary school. Since I am an only child, I considered my cousins, Maya and Emil, my pseudo-siblings. They lived on Bernal Hill, a residential neighborhood in San Francisco, and their house was on the same street as the hill itself. Our families would meet on the hill frequently to walk our dogs, and spend time together. One day, while I was in first grade, as we were walking around the hill, we noticed a new structure on the side of the hill. Seemingly overnight, a labyrinth had appeared, made out of the same red stone as the hill itself. Maya and I took ourselves through the winding circular paths, and my dog Trina tried to follow us. We came back to the labyrinth the next time we walked on the hill, and soon it became a ritual. Sometimes, we would race to the center — Emil and I would cheat by running over the path walls. Other times, we tried to gather rocks from nearby to make it even larger. It became a source of comfort and tradition — as we moved from school to school, as extended family members and beloved dogs died, as my relationship with my cousins grew closer and as it grew more distant, we still walked through the labyrinth. It was a comforting reminder of foggy days and haircuts, of home, of my family whose foundation remained strong while my cousins and I grew up and changed drastically.

Like the circular trail of the Bernal labyrinth, labyrinths are structures derived from sacred geometry and simple shapes that have existed since ancient times. They can serve many purposes, such as the Greek labyrinth which celebrated their kingdoms, or the the O’Odham man in the maze which represents the journey of life, to the labyrinth installed in Hampshire County Jail in Massachusetts to help prisoners find calm. Labyrinths are almost magical, in a sense, because of their extraordinary healing powers. Many have reported how labyrinths have helped them deal with past trauma, in part due to revolutionary discoveries by Francine Shapiro, PhD. Shapiro, a psychologist, found that by moving her eyes at a specific speed in a certain directional pattern, she could mimic the brain’s natural memory processing mechanism which occurs during the rapid eye movement (REM) stage of sleep. She turned her eye movements into a form of therapy to help people with PTSD and a wide variety of other psychological conditions by directly accessing the memories stored in the unconscious mind. Using labyrinths as a form of Shapiro’s therapy can produce an accessible and simple form of meditational therapy which can help a huge number of people.

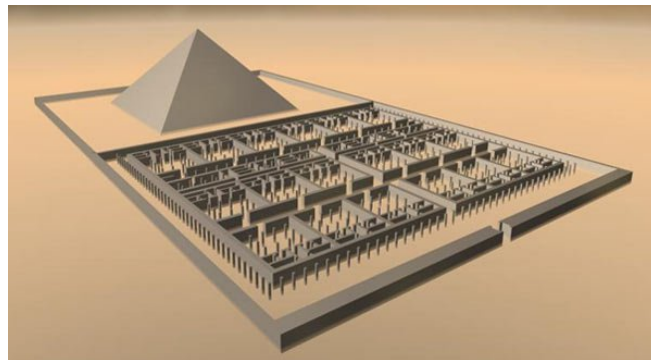
## **HISTORY OF LABYRINTHS**

Though labyrinths elicit a different type of structure than mazes, there is no formal distinction between the two. Mazes are frequently associated with complicated puzzles that have branching paths and are intended to be challenging and confusing, while labyrinths seem to refer to structures with one twisting path that is calming and undecptive. However, throughout history, the word “labyrinth” has been used to describe structures that were clearly intended to trap or trick people, and maze has been applied to simpler structures. Accordingly, the line between a maze and a labyrinth is blurry, but the difference between puzzle and non-puzzle structures can be qualified in other ways. One can use the word “multicursal” to describe a design with branching paths, and “unicursal” to describe one with a single path. Archaeological expeditions and mythology show that multicursal and unicursal labyrinths have shown up across continents for thousands of years. These labyrinths have had different purposes, from trickery to celebration to meditation, and have been highly effective at achieving their respective purposes.

The first recorded labyrinth-like architecture was found in Crocodilopolis, in Northern Egypt. Herodotus, known as the father of history, provided a detailed account of the building. He described that after the Egyptians divided their land into twelve parts, called “nomes,” they built

the labyrinth as a central memorial to celebrate their achievements. The labyrinth also included a center to sacrifice to the gods and administer justice in some jurisdictions. The building had twelve courts, one for the king of each nome, and a pyramid, surrounded by a multicursal labyrinth path and an outer wall (a digital rendering below shows the general plan of the courts). Herodotus recorded that to navigate between the courts one needed an experienced guide, and that there were several levels to the winding paths — lower levels were guarded to preserve the tombs of kings who built the labyrinth. Within the buildings there were temples devoted to all of the gods, forty statues of Nemesis, numerous pyramids, banquet halls reached by steep ascents, flights of ninety steps from the porticoes, figures of hideous monsters, statues of kings, and doors as loud as thunder. Herodotus said that he “found it greater than words could tell ... all of the works and buildings of the Greeks put together would certainly be inferior to this labyrinth.”<sup>1</sup>

In addition, Egyptians used labyrinths inside of pyramids to protect their belongings. Pyramids were built as tombs for many great leaders, and they would bring their belongings with them into the tombs because they believed that if they were buried with them, they would have them in the afterlife. In the past, they closed off their tombs with marble stone blocks, but then learned that this was not effective against raiders, who could drill tunnels through the stone. Pharaoh Amemenhet III, who lived in the 19th century BC, built a labyrinth inside of his pyramid to deceive thieves. The pyramid had a hidden stairway, which descended into an empty room which contained a secret sliding trap door in the ceiling, from which one could enter



another dead-end pathway, which contained a secret sliding stone in the wall, which led to more dead-end passageways with hidden sliding stones. Unfortunately, raiders eventually made it through the entire labyrinth and burned Amemenhet’s body, destroying his spirit in the afterlife. Although the ancient Egyptian labyrinth in Crocodilopolis was destroyed by the Romans and Amemenhet’s tomb was infiltrated, they were intelligently designed, elaborate structures.

The most well-known, culturally referenced story about a labyrinth comes from Greek mythology. The story begins with Minos, who had to compete with his brothers to become the King of the island of Crete. Minos prayed to Poseidon, god of the sea, for a snow-white bull to sacrifice and gain his support. Poseidon delivered the bull to Minos, but Minos found it too beautiful to sacrifice and decided to sacrifice one of his own bulls instead. Poseidon, angered, punished Minos by making his wife, Pasiphaë, fall in love with the bull. Pasiphaë had Daedalus, a skilled craftsman, build a hollow wooden cow so that she could mate with the bull from inside

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<sup>1</sup> Matthews, W. H. *Mazes and Labyrinths - Their History and Development*. Dover Publications, 2000. Page 7.

the cow. She then gave birth to the Minotaur, a monstrous creature who ferociously devoured humans. Minos had Daedalus construct a giant labyrinth to entrap the Minotaur, successfully protecting his citizens from the beast. Later, Minos heard news that his son had been killed by the Athenians; there are several stories of how his son was actually killed, but in every case Minos blames the Athenians. Minos waged a war against Athens to avenge his son, and then instituted a policy for the Athenians to be punished further: Aegeus, the king of Athens, was forced to send seven young boys and seven young girls to die in the Minotaur's Labyrinth every nine years. However, when the Athenians had to send sacrifices for the third time, Aegeus' son, Theseus, volunteered to kill the Minotaur. Theseus affirmed that if he was successful, he would put up a white sail on the voyage home, while a black sail would indicate his death. After arriving in Crete, Theseus fell in love with Ariadne, the daughter of Minos. She helped him navigate through the maze by giving him a ball of thread to trace his steps. Theseus successfully found and killed the Minotaur, and rescued the other Athenians. He took Ariadne on his return voyage, making many stops along the way to celebrate. On one island, they performed a dance called the Geranos, or crane dance, which mimics the motions of threading the labyrinth — this dance was practiced on that island until fairly recently. However, like many Greek heroes, Theseus was thoughtless, and forgot to put up a white sail on the way home. His father, watching for the ship, committed suicide out of grief, which left Theseus as the king of Athens when he returned. In this Greek mythology, the labyrinth was used to trick unlucky individuals, and to trap the dangerous Minotaur.

Labyrinths are also featured as important symbols in a few Native American cultures. To the Hopi tribe, a labyrinth called the Taupat (shown at right) is used to symbolize a mother and her child. The lines represent different stages of life and the umbilical cord. The center, which represents the amniotic sac and the womb, marks the beginning of the universal journey of life. Though the symbol represents a mother and child, it is also used to convey the relationship that humans have with Mother Earth and higher cosmic powers. The Taupat also comes from stories told about the origins of Hopi people. A myth tells that humans were born from caves in the



Earth called "kivas," which functioned as Mother Earth's womb. In this story, humans needed to follow a labyrinth in order to leave the kivas and reach the surface of the Earth.



The Tohono O'Odham nation also uses a labyrinth to represent themes of life (shown at left). Featuring seven concentric circles and a man at the entrance, it is frequently called "the man in the maze," and a common interpretation of the image illustrates that it represents "the difficult journey toward finding deeper meaning in life. The twists and turns refer to struggles and lessons learned along the way. At the center of the maze is a circle, which stands for death, and for becoming one with Elder Brother I'toi, the Creator."<sup>2</sup> Various interpretations believe that the man at the entrance represents the

<sup>2</sup> "Man in the Maze." Labyrinth Design, [www.earthart.org/happenings/kiva/labyrinths.html](http://www.earthart.org/happenings/kiva/labyrinths.html).

individual, the O'Odham people, or all of mankind. The man in the maze is frequently found on rocks, and the design is used to showcase the skilled techniques of craftspeople, such as silversmiths and basketweavers.

Recently, labyrinths have been reintroduced to the religious world. Grace Cathedral in San Francisco has several labyrinths which are open to the public. The indoor labyrinth is a replication of the labyrinth from the Chartres Cathedral in France. In 1220, the Chartres Cathedral inlaid a labyrinth in the floor so that Europeans wouldn't have to travel all the way to Jerusalem for pilgrimage. Instead, they went to Chartres, and walked along the labyrinth on the floor for spiritual guidance. The Grace Cathedral (shown at right) states that their labyrinths have three purposes. First, there is purgation, which is "the act of shedding thoughts and distractions. A time to open the heart and quiet the mind." When one reaches the center, there is illumination, "a place of meditation and prayer. Receive what is there for you to receive." Finally, upon leaving, there is union with "God, your Higher Power, or the healing forces at work in the world. Each time you walk the labyrinth you become more empowered to find and do the work for which you feel your soul is reaching."<sup>3</sup>



In more recent history, labyrinths have made a resurgence into secular modern culture as well, in places such as hospitals and even prisons. This mirrors the history of how doctors have viewed the body. Though priests used to be doctors, when medicine split from religion with the introduction of scientific research at the turn of the 20th century, doctors abandoned spiritual dealings. Only recently have physicians and doctors begun to see connections between the mind and the body again. Correspondingly, labyrinths have recently appeared in hospitals and other related environments. In 2007, Kaiser Permanente placed a walking labyrinth in their Sunnyside Medical Center in Clackamas, Oregon after hesitatingly accepting spirituality into a health center. These labyrinths function as a meditative space for patients, visitors, doctors, and nurses, and for those who cannot access the maze, there are smaller, portable labyrinths that can be traced with their finger. Labyrinths have also been introduced into prison systems, such as at Hampshire County Jail, in Massachusetts. Nelson Aponte, a 37-year-old prisoner serving ten to twelve years for larceny, reluctantly signed up for a class on labyrinths, before discovering how much they helped him find patience and and relieve stress. Aponte says, "the labyrinth has taught me to be mindful of my emotions,"<sup>4</sup> giving him more control over his emotions. With the resurgence of labyrinths in healing centers, many people have realized the potential power of unicursal labyrinths as a form of medicine or therapy. Scientific research confirms that labyrinths have beneficial effects among prisoners. For example, a study by Donna M. Zucker and Amy Sharma on the feasibility of labyrinth curriculums in correctional facilities found that "decreasing trends in systolic blood pressure before and after the labyrinth walk were seen in week one and in week six," showing how a course on labyrinths had aided the prisoners' health. In that study, the researchers also found that the walkers gained a meaningful connection to the instructor — on a scale from 1 to 7, with a higher number indicating a better score, prisoners

<sup>3</sup> "Our Labyrinths." Grace Cathedral, [www.gracecathedral.org/our-labyrinths/](http://www.gracecathedral.org/our-labyrinths/).

<sup>4</sup> Quenqua, Douglas. "The Labyrinth Revival." The Atlantic, 30 Apr. 2015, [www.theatlantic.com/health/archive/2015/04/the-labyrinth-revival/391517/](http://www.theatlantic.com/health/archive/2015/04/the-labyrinth-revival/391517/).

reported that the sincerity, honesty, expertise, and openness of the teacher were all above 6.3.<sup>5</sup> The recent revival of labyrinths has brought new forms of healing to unexpected places.

Throughout history, labyrinths have been prevalent for a variety of purposes. From the Minotaur's Labyrinth, which confused and trapped all inexperienced walkers, to the Hopi Taupat which embodied cycles of birth and life, to the labyrinth at Chartres Cathedral which was a site of pilgrimage, labyrinths have served purposes of both creation and destruction. Most recently, labyrinths have been powerful in bridging spiritual and physical healing. Labyrinths have special significance in helping people resolve troubling issues and finding calm.

## **EYE MOVEMENT DESENSITIZATION AND REPROCESSING**

Francine Shapiro, who was then receiving her PhD in psychology, was walking through a park one day in 1987 when she made a revolutionary yet simple realization. As she moved her eyes back and forth in a certain pattern, she noticed that her worrying thoughts resolved. In her book, "Getting Past Your Past," she explains, "they were the kind of niggling, nagging thoughts about a current problem that you generally have to do something deliberate about to get to change." Later, when she recalled the thoughts, "they didn't have the same 'charge' to them. They simply didn't bother me anymore."<sup>6</sup> Shapiro decided to research this phenomenon by testing it on approximately 70 participants in workshops, before realizing she had stumbled upon an important mental healing mechanism. In her research, she honed her eye movement techniques and found that her method was highly effective in making people feel better about traumatic memories or distressing problems. At first, she called it Eye Movement Desensitization (or EMD) because the eye movements were making the recipients feel less vulnerable to their experiences. In 1989, she published the studies from her controlled research in the *Journal of Traumatic Stress*, and sparked controversy. Many were doubtful of her new method because of how simple it was, though other psychologists quickly praised her work, and soon after people discovered how effective the treatment was.

Shapiro's work was especially exceptional considering the time she published it. She intended the treatment to be most applicable to people with severe trauma stemming from old memories, such as victims of sexual abuse and veterans. She decided to work with people who had been diagnosed with post-traumatic stress disorder (PTSD). PTSD is a condition induced by experiences of severe distress which may result in symptoms of intrusive thoughts, sleep disturbances, anxiety, hyperarousal where they are super alert, or "numbing," in which they shut down completely. At the time that she published her work, PTSD was a fairly new and unfamiliar diagnosis; it had only been accepted in the medical world since 1980. There had been no serious scientific studies for therapies, and doctors struggled to treat patients with the diagnosis. With the introduction of Shapiro's eye movement therapy, doctors suddenly had a simple and highly efficient method to treat an underserved community. In fact, Shapiro's treatment was so efficient that it only required an average of 12 sessions to comprehensively treat the condition!

After further research, Shapiro realized that the reason her therapy was so effective was due to how it worked with the brain's natural mechanisms for storing and processing memories. She also found that other bilateral stimulation, a stigma that occurs in a left-to-right rhythm, such

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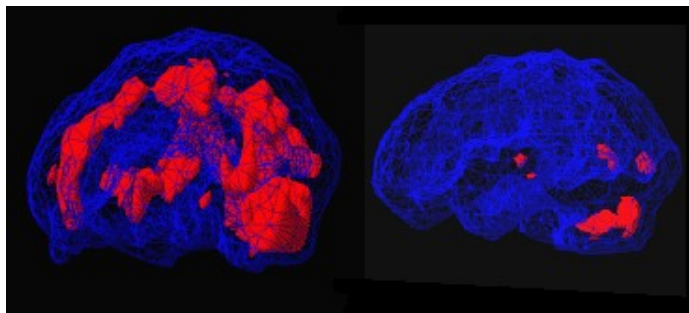
<sup>5</sup> Zucker, Donna M., and Amy Sharma. *Labyrinth Walking in Corrections*. 2012.

<sup>6</sup> Shapiro, Francine. *Getting past Your Past: Take Control of Your Life with Self-help Techniques from Emdr Therapy*. Library ed., Old Saybrook, Tantor Media, 2012.



as taps alternating from hand to hand or tones played from one ear to the other, would produce the same effects as eye movements; this is one reason why researchers have found that new labyrinths in prisons and medical centers have had beneficial mental, spiritual, and physical effects. However, since the name was already popularized, Shapiro couldn't entirely change to the more accurate "Reprocessing Therapy," but could add the word "reprocessing" to the end. Thus, the treatment was called Eye Movement Desensitization and Reprocessing (EMDR).

EMDR treatment directly accesses the unconscious mind, where our memories are stored in neural networks. This part of the brain is essential to how we interpret and react to the world around us. Memories are processed to gain the necessary information and discard unnecessary details. In addition, since the memories are stored in a network, later memories can alter the information gained in earlier memories to better aid our knowledge. The reason why we know these squiggles are letters, these groups of letters are words, and these words have meaning is because our brains are constantly accessing information from when we encountered them before. However, before our memories provide usable information, they must be processed. Most memory processing occurs during the REM stage of sleep, in which one's eyes move back and forth quickly. However, some memories are too distressing to be processed — they overwhelm the brain. These memories are stored differently from other memories: they are isolated from the rest of the neural net, meaning that they are not influencing or influenced by other memories, and the brain holds all experiences associated with the memory, rather than just useful information. This becomes a problem when the brain has to recall the memory, or it is brought to the surface by a "trigger," and the person relives the scary images and shocking emotions from the memory rather than the information they gained from it. This is why people can have recurring dreams or nightmares, and why people with PTSD often have flashbacks. The image at right depicts overactivity in a brain with PTSD before and after receiving EMDR therapy, showing how unprocessed memories affect the brain dramatically. However, in addition to PTSD, unprocessed memories can cause a



wide variety of psychological conditions. For example, a woman named Justine was repeatedly dating emotionally unavailable men and then acting clingy with them, ultimately hysterically panicking every time a boyfriend tried to leave her. This type of behavior was found to stem from an event that happened when she was just six years old: she had been in her bed at home when a thunderstorm began, and when she screamed for her parents, they were too far away to hear her because her voice got drowned out in the storm. This memory of terror and neglect went unnoticed for years, until she found a clinician who practiced EMDR and found out how it was undermining her ability to make healthy choices in her relationships.

EMDR has changed the way scientists think about the brain. Since memories are stored unconsciously, the conscious mind is unaware of how specific, often forgotten memories are impacting them. Since EMDR copies REM processing patterns, it opens a window into the unconscious mind and directly addresses the experiences that are at the root of psychological issues. It can directly change the way a person thinks about themselves, others, and the world, opening up now opportunities for their future rather than getting stuck in unhealthy habits. Since



unprocessed memories are a main cause of eroding happiness and mental health, Shapiro's therapy can unlock positive changes in many aspects of a person's life. EMDR is also significant because it opens up new opportunities for people with medical conditions. Instead of having to take a pill or other prescription, clients can partake in EMDR. Pills and other drugs can cause harmful side effects, and most only mask the symptoms instead of addressing the root issue. EMDR therapy, on the other hand, directly addresses the problem and helps people move on from their conditions. In addition, EMDR has opened up new opportunities for research. When it was invented, scientists believed that the hippocampus, which controls memories, irreversibly shrinks in people with PTSD. However, as brain scans were performed on people undergoing EMDR therapy, researchers found that "12 sessions of EMDR memory processing for people with PTSD were associated with an average 6% increase in the volume of the hippocampus. These effects were maintained 1 year later."<sup>7</sup> This research exemplifies how scientists still have much to learn about the mutability of the brain, and possible treatments for conditions which were considered untreatable. EMDR has greatly increased interest in the science of labyrinths, and is possibly partly responsible for the comeback of labyrinths.

This research also shows how EMDR provides an innovative resource to women and other victims of hyperprevalent rape culture in the current patriarchy. Since health is inherently political, EMDR therapy has the potential to be an empowering force for those with psychological trauma. The US Department of Veterans Affairs explains that women are more than twice as likely to get PTSD in their lifetimes — men have a 4% chance while women have a 10% chance. They explain that this is because "women are more likely to experience sexual assault, sexual assault is more likely to cause PTSD than many other events, and women may be more likely to blame themselves for trauma experiences than men."<sup>8</sup> Not only does patriarchy deny women's autonomy, it causes them to be more affected by trauma than men with the same experiences. This is again shown by a study conducted by Stop Street Harassment, which found that 81% of women and 43% of men in the United States have been sexually assaulted, and 31% of sexually assaulted women develop mental illness such as anxiety or depression while only 20% of men do. In addition, twice as many women changed their route or regular routine after sexual assault.<sup>9</sup> Additionally, these studies don't address how other factors can influence a person's conditions and agency in experiences of sexual assault — undocumented workers may face the added threat of deportation, people of color may lack the resources to pay for treatments or reach out to police because of institutionalized discrimination and violence, service workers face losing their work for speaking out against their bosses, and incarcerated individuals may not be helped or believed at all if they reach out. Recent movements such as #MeToo in October, 2017 and Times Up at various awards ceremonies in 2018 have helped take abusers out of positions of power and shed light on the situation, but these movements are perpetrator-focused, and have also failed to provide comprehensive relief to past victims. Since sexual assault is one of the most traumatic events that could possibly happen to a person in their lifetime, it often goes unprocessed by the brain. This means that, no matter what happens to the perpetrator, the victim may have difficulty with future partners because a certain touch could cause flashbacks to the

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<sup>7</sup> Ibid.

<sup>8</sup> "Women, Trauma, and PTSD." U.S. Department of Veterans Affairs, [www.ptsd.va.gov/public/ptsd-overview/women/women-trauma-and-ptsd.asp](http://www.ptsd.va.gov/public/ptsd-overview/women/women-trauma-and-ptsd.asp).

<sup>9</sup> Chatterjee, Rhitu. "A New Survey Finds 81 Percent of Women Have Experienced Sexual Harassment." NPR, 21 Feb. 2018, [www.npr.org/sections/thetwo-way/2018/02/21/587671849/a-new-survey-finds-eighty-percent-of-women-have-experienced-sexual-harassment](http://www.npr.org/sections/thetwo-way/2018/02/21/587671849/a-new-survey-finds-eighty-percent-of-women-have-experienced-sexual-harassment).

experience. When sexual assault goes unprocessed, the feelings of lack of control, distrust, and violation can return at once, and get in the way of a person's relationship with someone that they do trust. With the realization of Shapiro's therapy, women who can afford therapy now have a simple and highly effective way to heal past scars and find healthy, strong relationships in the future. EMDR therapy can reduce the psychological damage of sexual abuse and help women regain trust and happiness in their futures.

Eye Movement Desensitization and Reprocessing therapy is a revolutionary treatment for all kinds of psychological issues. By accessing unconscious memories with simple motions, Shapiro has provided millions of people with comprehensive treatment for a huge variety of psychological conditions.

## **HEALING POWER OF LABYRINTHS**

Labyrinths are highly tied to the study of EMDR therapy. Clinicians and researchers have used the idea of a labyrinth to metaphorize the healing path as people process their old memories. More directly, labyrinths are used by some clinicians as a method of bilateral stimulation and meditation to function as treatment. The resurgence of labyrinths in hospitals, churches, and other places related to physical, mental or spiritual health is a nod to the ways that labyrinths can be used as a form of EMDR towards better mental health.

A study by Barbara Wizansky, a clinical psychologist and supervisor with over 20 years of experience treating children and adolescents, shows how labyrinths are used to represent the journey through EMDR treatment for children. In her study, she introduces a child named Ron, whose mother has extreme standards and incessantly demands more of him, and at times punishes Ron by yelling and spanking him. Ron is lively when playing and having fun, but any slightly confrontational word or action can spark a strong reaction — sometimes, he bursts into rageful fits of screaming and violence, and other times he shrinks into stubborn silence. Due to the high number of traumatic experiences, Ron's "immature brain becomes increasingly sensitized to the quick triggering of hyper arousal and dissociative reactions. As these classic fight, flight and freeze responses become more immediate, the range of emotions which should be at the child's service become less and less accessible."<sup>10</sup> This makes it more difficult to engage Ron in therapy which demands he access an internal mind which holds more frightening emotions. As a part of the treatment, Wizansky spends the first month and a half practicing play therapy, knowing that while this may build trust needed for Ron to access more vulnerable memories, it may also allow him to develop a pattern of keeping up his emotional walls as he plays games. Then, when they begin to explore EMDR while discussing specific events that had frustrated Ron, they use a maze to represent the journey. In the study, Wizansky states that the maze is "a metaphor which stands first for the problem and then for the inner emotional space wherein resides the emotions, the feelings and the cognitions associated with the problematic area, both the negative and the positive."<sup>11</sup> The maze serves multiple purposes, such as symbolizing the journey toward mental health, the problem itself, and the inner emotions associated with the challenge (both negative and positive). Wizansky begins by asking Ron to draw his own maze (shown above), with an entrance and an exit, to show how everyone's maze will be different and to place the problem at the entrance and what they want to achieve at the exit. She then discusses the maze with Ron, asking, "Have you ever been in a maze? It is so hard to find the right path out. Sometimes it's a worry to be inside. Sometimes it makes us mad ...

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<sup>10</sup> Wizansky, Barbara. *Footsteps through the Maze: A Model for Using EMDR with Oppositional Children*.

<sup>11</sup> *Ibid.*

Sometimes we feel like ‘big shots’ and are sure that we’ll have no trouble getting out. Other times we feel upset when we can’t succeed in finding a way out.”<sup>12</sup> This discussion draws directly from stories about mazes. It shows a clear influence from the myth of the Minotaur, as she explains that “there might be monsters in there.”<sup>13</sup> As they begin discussing the issues that anger Ron, Wizansky asks that he drum on his knees, alternating from left to right. This provides a form of bilateral stimulation which she calls “Footsteps through the Maze,” and works as EMDR therapy. With the image of the maze and the footsteps, Ron becomes Theseus, working through a psychological maze; instead of the purpose of killing the minotaur, he has the purpose of reprocessing the memories which underlie his family dynamic and make him oppositional.

Labyrinths can go beyond representing the process of EMDR. In fact, labyrinths are one method of bilateral stimulation that can function as EMDR instead of eye movements. For centuries, the labyrinth has been described as a meditative experience, such as the pilgrimage at Chartres Cathedral in France. Many people find the mindful walking a relaxing experience, which helps put them in the right mindset to handle other challenges in their lives. This is partly because walking through a unicursal labyrinth provides bilateral stimulation, where one is doing something from side to side repetitively, without having the stress of a challenging multicursal puzzle or any other purpose. In a labyrinth, bilateral stimulation is present in a person’s steps, and eye movements as they twist along the paths, switching between clockwise and counterclockwise. Bilateral stimulation is more present here than in walking outside of a labyrinth because a part of the brain has to focus on turning along with the path, rather than moving in a straight direction. And while it may be difficult to direct the treatment, since Shapiro spent years refining the speed and direction of her eye movements and pairing it with appropriate



clinical conversation directions, the combination of the movements of a labyrinth and a reflection on one’s life can be healing. This is shown by Nelson Aponte, who says that the first time he believed in the labyrinth’s powers was on his fourth session in Hampshire County Jail. He shares that “I was just thinking about my family, those I harmed, and what my life has become,” which resulted in “a sense of freedom.”<sup>14</sup> By simultaneously focusing on moving through the labyrinth

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<sup>12</sup> Ibid.

<sup>13</sup> Ibid.

<sup>14</sup> <https://www.theatlantic.com/health/archive/2015/04/the-labyrinth-revival/391517/>

and the unprocessed memories that impair his mental health, Aponte was able to replicate the brain's memory processing mechanisms, and find a clear relief. Labyrinths have clear power for healing through the EMDR process outlined by Francine Shapiro, PhD.

Mythology surrounding labyrinths and their application come together to provide new methods of healing for a huge variety of psychological conditions. In an imperfect world where you can't avoid distress and trauma, labyrinths and associated bilateral stimulation therapies are powerful tools to help people make sure that they don't have to be held back by an unprocessed past. Though it can't eradicate bad emotions — people will still feel guilt, anger, grief, nervousness, and confusion — but they can prevent these emotions from being the climate, rather than the weather. Bad emotions can be in reaction to other stigma in life, but they shouldn't be the way a person feels most of the time. With labyrinths becoming more accessible as they are placed in churches, hospitals, and even prisons, many more people will be able to process their memories easily, restoring mental health and happiness.

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