

Attachment and Hakomi

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Editor's note: **Marilyn Morgan MHSc (Hons), SRN, MNZAP** was a psychotherapist for 25 years. She was a certified Hakomi therapist and trainer who was program coordinator for the diploma in integrative psychology (Hakomi) at the Eastern Institute of Technology in Hawkes Bay, New Zealand. She was a beloved teacher in the Hakomi Institute with a medical background in nursing who brought a special interest and talent into relating Hakomi to the latest trends in neurophysiology. Her Ph.D. dissertation dealt with doing Hakomi therapy trainings and was published as *The Alchemy of Love: Personal Growth Journeys in Psychotherapy Trainings* after her untimely death. We are publishing two of her articles in this edition of the *Hakomi Forum* as a special tribute to her, though she would surely be embarrassed to have older pieces made public without the latest references included. They are both valuable, but since they each contain material about neurophysiology, there is some overlap in content presentation. We grieve her too-early loss as we celebrate her ongoing healing spirit through our memories, and the gift of her writings.

Attachment Theory

Introduction

There has been a growing interest in attachment theory since the pioneering work of John Bowlby, Mary Ainsworth, and others. In 1951, Bowlby gave a report to the World Health Organization based on cross-cultural studies of the effects of early deprivation on children. He found that early neglect in a child's life led to a later lack of empathy and behavior problems, and suggested that these children would likely go on to become poor parents. Developmental psychologists, neuroscientists, psychotherapists, among others, are excited about the continuing research results that are emerging from studies on attachment, and the implications of these for preventative social and mental health and therapeutic interventions.

Attachment is the deep, lasting bond between a child and those having a caring, intimate relationship with that child. The nature of the attachment bond, established from the beginning of life, has far-reaching implications for the developing individual over the whole life span. The nature of the attachment experience influences thinking patterns, the body physiology and growth, emotional capacity, life satisfaction, the nature of relationships, parenting style, and what is held by that individual to be important. Attachment also occurs in animals between the mother and infant; animals also become strongly attached to people. People may form powerful attachment bonds to pets, which are sometimes bred to have the characteristics of a baby: flat face, big eyes, small size.

The baby is born to love and to attach. This instinct is rooted in thousands of years of evolution, and is based on the need to survive and live as a member of a social group. Dr. Peter Cook pointed out that humans, like monkeys and apes, are a carrying species who naturally hold their infants and feed them frequently. The mother is the principal caregiver for the baby, assisted by other adults. This has been shown to be constant for millions of years and across cultures (Cook, 2004).

Contrast this with a mother in modern Western-style suburbia, who might live alone with her baby, unsupported by other adults. She pushes the infant around in a pram, the baby often looking out towards the world, out of contact with the mother's body and not within the orbit of her gaze.

Attachment theory tells us that babies who do not develop a secure bond with the caregiver are far more likely to go on to have a multitude of difficulties that reduce personal life satisfaction, and negatively impact on the health of society as a whole. The human baby is born helpless in so many ways, and much of the neural development in the brain is yet to come. The process of interaction between the mother and other caregivers with the baby literally shapes that baby's growth and development. In turn, the caregiver is also influenced by the baby, the interaction system being one of mutual regulation.

It is important to note that genetic and environmental influences also impact on attachment. Some babies, for example, are born more sensitive or show a greater degree of shyness. Others are more lively, tough, and active. It is important to note, however, that having a secure attachment does not ensure a trouble-free life. Children with a secure attachment history may also experience a range of problems that occur in spite of their positive attachment experiences. These problems may result from biological, emotional, and social influences.

For each of us, the brain, nervous system, and body holds the imprints of the truth of our lives. The attachment experience is imprinted into the body: into the cells, the muscles, the neural circuitry. It becomes a profound influence on our life-stories and the way we narrate them, our longings and expectations from others, our limitations, along with our habitual patterns and defensive behaviors. Using the mindful, attentive, non-violent techniques of Hakomi, we can contact the truth of this history and how it is manifesting in present day life and relationship. Core beliefs formed during those early relationship interactions can be renegotiated, making it possible to transform limiting, automatic patterns of being in the world. Reconnection with deep meaning and purpose can occur. The growth of self-esteem and compassion is nurtured, along with the capacity to give and receive love.

For the first time in history, we have certain knowledge of the means whereby the capacity for trust, empathy and affection can be shattered in the first three years of life. Quite apart from the question of whether or not trust, empathy and affection are better than mistrust, indifference and hate, the world will not survive many more generations of suspicious, hardened, affectionless individuals. If we are not to die, we are to change.
(Michael Mason)

Functions of Healthy Attachment

There are many purposes behind the formation of the attachment bond. A secure attachment with caregivers ensures:

- Safety and protection of an immature, vulnerable child.
- The development of a feeling of trust in the other providing a template for future emotional relationships with friends, lovers, partners, and children.
- Based on this experience of trust, the child feels secure enough to venture out and explore the environment, enabling curiosity and the opportunity to expand cog-

nitive and social abilities.

- The child develops the ability to regulate emotions and impulses.
- The child has a healthy sense of identity and feeling of self-worth.
- The child develops a balance between being able to depend and be independent.
- The child develops the capacity to be compassionate, empathic, to self-reflect, and to show "theory of mind."
- The child develops core beliefs to support a satisfying life that sustains mutually healthy social and intimate relating, and the ability to form and maintain friendships.
- The child develops resilience to deal with life stresses and challenges.

Necessary Conditions for Secure Attachment

Attachment occurs in the context of relationship. Relationship and connection continues to be the fundamental influence on a person throughout life. A secure attachment style is formed early in life, when the following conditions are present in an attuned, loving way:

- *Touch.* Touch communicates love and caring, security and containment, and forms the foundation for the appreciation of boundaries.
- *Eye contact.* The gaze between the baby and the caregiver is of vital importance in the release of hormones and substances that allow feelings of closeness and intimacy, comfort and care, as well as influencing neural development.
- *Smiling and positive emotional state.* The smile of the baby rewards the caregiver, stimulating feelings of warmth and care. The smile of the caregiver helps the baby to feel welcome and secure. The positive emotional state is communicated through tone of voice, hand gestures, posture, movement, and is part of the "limbic resonance" that flows between caregiver and infant. This "limbic resonance" is a sub-cortical communication that is a vital part of satisfying emotional relating throughout life.
- *Responsiveness to needs.* When the baby's needs are met, arousal and stress remain within manageable levels. The child, who feels "bad" because of physiological distress, grows to feel "bad" or "wrong" as a person.

Insecure Attachment

The child who does not develop a secure attachment is likely to experience problems in the following areas, showing (see Table 1) :

- Low self-esteem
- A tendency to avoid others or be overly clinging to others
- Overwhelm when stressed
- Poor ability to manage impulses or strong emotions
- Problems with friendships
- Feelings of alienation or hostility in regard to family and authority figures
- Antisocial behavior, aggression, and violence
- Mistrust in others
- Depression, despair, and hopelessness
- Poor conscience, overblown or little sense of entitlement
- Inability to feel compassion or empathy
- Negative parenting behavior later in life

Parenting Styles and Attachment in Children

Note: the mother is usually the primary caregiver and thus

has the most impact on attachment patterns. However, another adult may be the primary caregiver. A person can also have different attachment styles with different attachment figures. For example the child may have an anxious, ambivalent attachment with the mother, an avoidant attachment with the father, and a secure attachment with the grandmother. (See Table 2)

Repair of Attachment Disorder

Working with Children

Therapy can start with children who have experiences of significant losses, or those that have impaired attachment due to such factors as neglect, abuse, illness, separations, adoption, and premature birth. An attachment therapy program, such as described by Levy and Orlans (1998), is likely to include:

- Involvement of caregivers in the child’s therapy. Caregivers may be in with the child, participating in the therapy, or watching through an observation window.
- Therapeutic support for family members. The problems the child experiences may have severely stressed those caring for him or her. Caregivers may need their own individual therapy to work through unresolved attachment issues that are impacting on the child.

Secure	Insecure		
<i>Secure (healthy)</i>	<i>Ambivalent (anxious)</i>	<i>Disorganized (unresolved)</i>	<i>Avoidant (non-attached)</i>
Comfortable with closeness and trust	Ambivalent about closeness and trust	Disorganized in parent’s presence	Unable to form emotional connection
Feels secure, able to be vulnerable	Often insecure, may be controlling or manipulative	Confused, overwhelmed, may be aggressive and controlling	May lack conscience or compassion for others, narcissism
Positive core beliefs and templates regarding self, other, and relationship	Some negative core beliefs and templates regarding self, other, and relationship	Strong negative core beliefs and templates regarding self, other, and relationship	Strong negative core beliefs and templates regarding self, other, and relationship
Individuality and togetherness blended	Rejecting or clingy	Pseudo-independent or traumatic bond	Pseudo-independent

Table 1. Continuum of Attachment

Secure	Insecure		
<i>Secure (autonomous)</i>	<i>Ambivalent (anxious)</i>	<i>Disorganized (unresolved)</i>	<i>Avoidant (non-attached)</i>
Mother warm and attuned, consistent, quickly responds to baby's cries.	Mother inconsistent, unpredictable, or chaotic. Attentive but not attuned. Most tuned into fear.	Unresolved trauma in mother, or parent abusive to baby or shows severe neglect.	Mother emotionally unavailable or rejecting. Dislikes neediness, favors independence.
Baby readily plays, explores, cries least, most easily put down. Seeks mother when distressed, readily comforted, maintains contact. Preference for parent over stranger.	Baby cries a lot, clinging and demanding, angry, upset by separation, anxious, hard to soothe, limited exploration.	Baby upset, terrified, dissociated, confused, overwhelmed. Maybe clingy or unresponsive, high arousal, fear and tension, incoherent.	Baby does not cry on separation, seeks little contact, unresponsive, often upset when put down. Avoids mother when distressed. Randomly angry.

Table 2. Parenting Styles and Attachment in Child

	Secure	Insecure		
	<i>Secure</i>	<i>Ambivalent</i>	<i>Disorganized</i>	<i>Avoidant</i>
Child	Easily makes friends, popular, resilient, good self-esteem. Warm with parents, like physical contact. Teachers treat in warm, age-appropriate ways.	Mixes intimacy seeking with hostility. Cute or ingratiating. Worries about parent when apart. Trouble with peers.	Times of dissociation, overwhelm, poor concentration, incoherence. May be fearful around parent or irrationally protective of parent.	Teachers controlling and angry. Abrupt, neutral with parents. Absence of physical contact. Isolated and no close friends. Jealous.
Adolescent	Interacts and relaxes with larger peer group. Can speak thoughtfully about parents, assertive, listens to others, copes with study okay.	Difficulty in sustaining friendships in larger peer groups. Seen by peers as anxious, brooding. Angry with parents. Lonely. Addictive to people.	If triggered addictions, withdrawal, self-harming. Lack of coherence, freezing, acting out behavior. Run away from home, rejects parents or fearful.	Isolated from peers, seen by them as hostile and superior. Not valuing relationships, hard to remember early childhood events. Addiction to work, achievement.
Adult	Access to wide range of feelings and memories. Values attachment. Coherent narrative of life story. Balanced view of parents, has worked through childhood issues. Children usually securely attached.	Pre-occupied. Anger and hurt towards parents, passive, or fearful. Life narratives long, emotional, vague. Can't see own responsibility in relationships. Dreads abandonment. May have ambivalently attached child.	During discussions of abuse or loss, lapse in normal functioning and reasoning. Memory lapses in narrative. May not notice abuse in self or others, or be oversensitive. May repeat abusive patterns.	Dismissive. Idealizes parents maybe. Shallow self-reflection. Does not value love and connection. Little detail in narrative of life story. May have avoidant child.

Table 3. Attachment Styles Through Life (three tables summarized from Karen (1994), Siegel (1999), Levy & Orlans (1998).

		dependence	
		low	high
avoidance	low	secure/secure	ambivalent/preoccupied
	high	avoidant/dismissing	disorganized/unresolved

Table 3. Model of Attachment based on Bartholomew (1990).

- Education. Caregivers are given information on parenting, attachment issues, corrective experiences, and the process of recovery.
- Corrective emotional experiences for the child. Techniques include play therapy, psychodrama, art work, verbal interaction with emotional attunement, imagery, skill training, touch and holding, and space for experiencing and expressing emotions.

The therapeutic program is in three stages:

1. REVISIT

The child and therapists revisit the significant experiences of separation, abandonment, abuse, violence, neglect, etc.

- The child's somatic and emotional responses and personal meaning are explored
- The events are reviewed
- Emotions are acknowledged and expressed
- Defenses are managed

2. REVISE

This stage includes:

- Identifying and acknowledging beliefs formed
- Challenging negative beliefs, giving new information
- Repetition and rehearsal of new beliefs and behaviors
- Body-mind techniques to facilitate emotional expression and the development of healthy behaviors

- Mourning losses
- Teaching boundaries and rules
- Building trust in eye-to-eye, in-arms situation
- Teaching communication skills, self-control, and problem solving

3. REVITALIZE

This stage includes:

- Developing a positive sense of identity
- Family resourcing: developing positive interactions within the family, and setting up support for the family from outside sources
- Building positive values, expressing forgiveness

Changing Attachment Style for Adults

Robert Karen in his book, *Becoming Attached* (1994), suggests the following ways of addressing and repairing early attachment issues that are now limiting the adult:

- Mourning losses
- Addressing and resolving shame
- Experiencing a new relationship model (in therapy or intimate relationship)
- Reflection on the patterns of relating behavior, emotions, and re-examining from an adult perspective
- Developing the positive patterns of relationship and practicing these

Karen says “A growing body of evidence indicates that these three variables—having had a loving, supportive figure available in early childhood, having undergone in-depth psychotherapy, and/or being in a stable relationship with a supportive spouse—are perhaps the most important elements in breaking the intergenerational cycle of emotional damage” (p. 405).

Other writers suggest:

- Having a baby is an opportunity for change (Selma Fraiberg, 1977)
- Experience early wounding, express anger, and give up the illusion of having had a happy childhood (Alice Miller, 1990)
- Use of immersive transference (Karen Walant, 1999)
- Working to change together within a committed marriage (Harville Hendrix, 1998)

For further information on attachment styles and therapy, I recommend the following books (see reference list for details):

- *Becoming Attached* by Robert Karen
- *The Developing Mind: How Relationships and the Brain Interact to Shape Who We Are* by Daniel Siegel
- *Creating the Capacity for Attachment: Treating Addictions and the Alienated Self* by Karen Walant
- *Attachment, Trauma and Healing: Understanding and Treating Attachment Disorder in Children and Families* by Terry Levy and Michael Orlans

The Brain, the Body, and Attachment

The attachment patterns are imprinted in the very structure of the brain and nervous/hormonal system. For those who are unfamiliar with brain anatomy and physiology, I will summarize here the structure and function of the brain and introduce some basic terminology. A method described by Siegel, (1999, p. 11) to conceptualize the brain is useful, as the brain’s three-dimensional convoluted shape is hard to follow from two-dimensional diagrams: Make a fist with your thumb tucked inside. Your wrist is the top of the spinal cord at the base of your neck. The brain stem is your lower palm, your thumb the limbic system, and your fingers the cerebral cortex. At the back of your hand would be the cerebellum, and your eyes in front of your middle two fingernails.

The Cerebral Cortex

The cortex is the outer layer of the brain, comprising cell bodies (or grey matter as it is popularly known). The cortex is specialized to represent and organize our experiences, integrating and storing information. There are two specialized cerebral hemispheres, the right brain and the left brain, each receiving information from the opposite side of the body. Information is shared through a body of nerve fibers connecting the two halves, called the corpus callosum. There are four lobes in each hemisphere: frontal, parietal, temporal, and occipital.

Areas of the frontal cortex are of particular interest:

- The *orbitofrontal* cortex, helps inhibit impulsive behavior and modulate emotions.
- The *dorsolateral* cortex reconstructs meaning, helps change mental sets, and organizes associations.
- The *ventromedial* cortex allows us to experience emotions and meaning and engage motor drives. It is highly active in manic and creative states, and inactive during depression when it seems as if all drive and meaning has drained from life.

The Limbic System

The limbic system and associated structures lies in a central position in the brain. At this level of the brain—more inner and deeper in position—activation is felt as a total body experience. This area is concerned with emotions, but is also a bridge. Impulses pass through limbic structures to and from the senses, the body in general, and brain stem. There is an outflow to the cortex. The body information influences the emotional state and emotions are essential for our thinking processes. Making a decision without emotional input is virtually impossible. Essentially, emotions are survival mechanisms deeply rooted in the body. They let us know about the significance of input: danger, potential benefit, and pleasure. Emotions influence our actions and our decisions as well as providing richness and flavor to our conscious experience. In your fist representation of the brain, the limbic structures are represented by your thumb. The structures are:

Thalamus. This is a communication and relay center for nervous pathways from the senses. The thalamus (specifically the lateral pulvinar within the thalamus) operates like a spotlight, turning to shine on a selected stimulus. It sends information to the frontal lobes, which then maintain at-

tion. (there is one thalamus on each side)

Hypothalamus. The small hypothalamus, which sits below the thalamus above, controls the four f's: (feeding, fighting, fleeing, and fornication), temperature, sleep, autonomic nervous system reactions. The hypothalamus dysfunction thought to be involved in eating disorders is correlated with high serotonin concentration in anorexics (which reduces appetite), and low serotonin levels in bulimics.

Pituitary gland. This gland is vital in the secretion of hormones, many of which set off other hormonal cascades. The pituitary is part of the HPA (hypothalamus, pituitary, adrenal) axis, a vital part of the trauma and stress response.

Hippocampus. This area is essential for the formation of declarative memory, indexing our episodic, personal memories, retrieving newly laid down memories and spatial coding. London taxi drivers have been shown to have enlarged hippocampi (there is one on each side).

Amygdala. Expressions of fear are picked up by the amygdala. The left amygdala responds more to the vocal expression, the right to facial movement. The amygdala is the emotional center, the alarm system, and it stores emotional memory imprints, especially fear memory.

Basal ganglia. These have a role in movement and procedural memory.

Olfactory bulb. Concerned with smell.

Cingulate gyrus. The center for attention focus, related to cravings and addictions, and, interestingly, also in the initiation and letting go of physical grasping movements. This is also the area associated with maternal behavior.

Orbitofrontal cortex. Although part of the cortex and right at the front of the brain, it is in close physical proximity to the limbic system and is an integral part of limbic functioning.

The Brain Stem

This is the most ancient part of the brain, and is similar to the brain of a reptile, hence the term often used is reptilian brain. This part of the brain mediates some of our most basic functions and consists of the following structures:

Reticular formation. Control of arousal and sleep/wake cycles.

Pons. Receives visual information en route to the cerebellum.

Cerebellum. Coordination of movement. The cerebellum

also has other functions related to soothing high arousal and processing information.

Medulla. Control of breathing, heartbeat, digestion.

Neurotransmitters and Hormones

The complex system of neurochemicals that are concentrated in areas of the brain and found throughout the body, profoundly influences our mood and relating behavior. For an interesting discussion of the effects of oxytocin, a hormone associated with birth, lactation, feelings of love, and parenting behavior, see Odent (2003).

Attachment and Changing the Brain

As already described, the relationship between the mother (or other caregivers) and child is crucial for the development of pathways from the limbic system to the prefrontal cortex. When the child expresses emotion, it is important for the parent to respond in a congruent way. This is right brain-to-right brain connection. Secure attachment allows the child to regulate her own emotional states, develop autobiographical narratives, and respond appropriately in social situations. Recent research using brain imaging techniques with very introverted people (i.e., avoidantly attached), found that they had no brain response to a smile from another person, whereas more extraverted people showed activity in the amygdala on the left side. Alan Schore (1994) describes the pathways that allow the child to tolerate pleasure and excitement, then to deal with disappointment and shame. Unresolved trauma and grief in the parent have been shown to be a reliable predictor of disorganized attachment in the child (Seigel, 1998).

Contact and Loving Presence in Therapy

Attunement and empathy is an essential foundation to therapeutic change. Hakomi therapists become skilled in tracking. This is essential for the contingent communication that activates resonating brain states and corticolimbic connections. Therapists need to be adept at tracking their own body processes, as these are vital in connecting deeply with another. Therapists need to be willing to compassionately repair empathy lapses as these repairs pave the way to self-regulation in the client. Attuning to and managing shame states allows for new growth in limbocortical pathways. This is important for trainers to facilitate in students, as well as for therapists with their clients. Students can also be helped to develop attunement through mindfulness

practice in their training. In a way, the therapeutic process needs to mirror the developmental so the client can form new imprints and pathways for a more secure attachment.. A “meditative” approach, or mindfulness, as is used in Hakomi psychotherapy, and the attuned presence of the therapist is likely to greatly increase the possibility of change.

Brain and Interpersonal Reality

The brain mirrors our complex human systems. For example, in the avoidantly attached child, there seems to be a disconnection in the integrative functioning of the two hemispheres that parallels the emotional disconnection within the mother-child relationship (Siegel, 1998, p. 190). As the father or mother reaches out to the baby, and the baby fixes his gaze upon the parent, nerve endings and dendrites reach out to each other in the microscopic landscape of the brain, forming neural bonds that match the human bonds.

Complexity

The brain is vastly complex and is best understood using the principles of complexity theory. It is self-organizing. As certain states are engraved within the system they become more probable. This probability is influenced by the history and the present context. The most “healthy” brain has a balance between continuity and flexibility, between rigidity and chaos. There is a move towards increasing complexity, including differentiation and integration. A small change in input can lead to huge and unpredictable changes in output. Patterns of organization have both emergent and recursive characteristics. The brain and mind are in a continual state of creating and being created.

Memory

Many clients with attachment issues—especially those with avoidant or disorganized attachment—have problems with memory. They may not be able to consciously remember many childhood incidents, yet unwanted feelings and images from childhood experiences intrude, and patterns of response, emotion, and behavior laid down early continue to dominate.

Ron Kurtz described the child as “the mapmaker.” Neuroscience emphasizes that the connections formed within the brain are experience-dependent. The child is born with approximately 100 billion neurons. If these nerve cells were placed end-to-end they would stretch two million miles. There are many nerve connections already in place at

birth, the brain being hard-wired to seek connection with caregivers, and basic bodily functions proceed. However, the major growth of neurons and the wiring of neuronal circuits are yet to take place depending on experiences to come. Eventually, each nerve cell is likely to have up to 10,000 connections.

Daniel Siegel described the brain as an anticipatory machine. The infant’s and child’s interactions with her world are imprinted in her brain circuitry. She is “wired up” for a particular world. Her brain is coded with all kinds of memory, and most of the early memory will be unconscious. However, this memory will deeply affect later emotions, behavior patterns, beliefs, and abilities to process information. In Hakomi we call this core material, and the shaping of character styles. Attachment styles are another classification of these early patterns.

When the parent to whom the child goes for comfort and mirroring is also a source of fear, this creates massive neural disorganization. Trauma, neglect, and abuse in the young child have a serious impact on brain structure and function. Those parts of the brain undergoing critical growth at the time of the trauma will be particularly affected. The abused or neglected child may grow up to have a smaller brain overall, fewer fibers in the corpus callosum connecting the left and right hemispheres, a smaller hippocampus, and poor development of prefrontal lobe areas. This is part of what constitutes a disorganized attachment.

Multiple Memory Systems

Neural networks fire in web-like patterns. These are called neural nets. The more frequently a particular net is activated, the more likely firing is in the future. This increased probability is how the network “remembers.”

There are different kinds of memory:

- *Procedural memory* is the patterns of behavior and habits we learn. It is mediated by the cerebellum and striatum.
- *Semantic memory* is memory for the features of things, such as face recognition and factual data.
- Emotional memory is related to the significance of events and whether they feel good or bad.
- *Sensorimotor memory* resides in body sensations, posture, and body responses.
- *Declarative or narrative memory* is mediated by the hippocampus and prefrontal cortex.
- *Implicit memory* is unconscious and includes procedur-

al memory, somatic, and emotional memory. Implicit memory is stored in the right hemisphere, the amygdala, and basal ganglia.

- *Explicit memory* is autobiographical and narrative in nature. It is stored in the left hemisphere and hippocampal processes are necessary for its encoding, and sometimes retrieval. Explicit memory material can activate conditioned emotional responses.

John Briere, a traumatologist and cognitive-behavioral therapist, described *deep cognitive structures* that were narrative in nature, but held in a non-conscious way because when these were activated they triggered associated emotional responses that were distressing to the person. These deep cognitive structures may be triggered by events that bear some similarity to the original memories.

A woman's distressing fight with her husband is likely to have led to activation of procedural memories (yelling at her husband as her mother had yelled at her), emotional memories (feeling bad for speaking out), and somatic memories (a sick feeling in the stomach). Implicit memories do not feel like "memories" as they have a here and now quality to them, and "blend" with current reality. Distressing emotional or traumatic memories are not consolidated or resolved, and are therefore not integrated into a coherent narrative. This integration is usually what clients are looking for when they come to therapy wanting "to feel better and to make sense of life."

Development of Memory

The infant can make procedural and emotional memories from birth. She can also start forming memories for features of things. The right hemisphere is "on-line" at birth. However, the hippocampus, necessary for encoding the context of memory, is not developed until about three years of age, hence infantile amnesia. The left hemisphere, necessary for verbal encoding and developing narratives, is not functioning until around the same time.

In traumatic and very stressful situations, the amygdala increases in function and the hippocampus is shut down. The hippocampus is particularly sensitive to high levels of cortisol, which causes damage to the neurons there. So, for a child enduring ongoing high stress levels, even if she were old enough to form narrative memories, this function could be suppressed. If explicit memory is not encoded in the first place, then it can never be retrieved. Many clients may never remember, in a narrative way, some of the traumatic events of childhood.

One of the most effective transformational processes in Hakomi psychotherapy is working with "child consciousness." Seen through the lens of neuroscience, this can be understood in the following way: The client I am working with is experiencing unconscious, implicit memory. Susan, we can call her, looked at me with wide, child-like eyes. If I am attuned to her I feel the longing of the child to be believed and recognized. This implicit memory was activated by Susan talking about her childhood, but it could have been triggered by a probe, or by hanging out mindfully, sensing a gesture or body sensation. (Associations linked to a procedural or emotional memory). One needs to go slowly to allow the associational neural nets to be activated. The unconscious is brought into consciousness by applying focused attention, and through contact, and resonating, contingent, right brain responses. The "child consciousness" is a pattern of unresolved, unintegrated memory associations. Pacing, attending to safety, and loving presence keeps the arousal levels down so the frontal lobes and hippocampus can mediate a context and new meaning. Links are made as the "adult" gives new information to the "child." Impulses are moving across from hemisphere to hemisphere, from amygdala to hippocampus, and on to the orbitofrontal cortex. The dorsolateral cortex helps change the mental set. The medial cortex starts making connections.

We are constantly storing, activating, and re-storing our memories. Lynn Nadel, a researcher on the function of the hippocampus, describes a new finding. When memory trace is activated, it is vulnerable for a short time, and can be changed before it is re-coded. Further research is confirming this finding. (See "Not so Total Recall" in *New Scientist*, May, 2003, for an excellent article on the latest findings). This would affirm the importance of working in the here and now. The hippocampus can make a new memory, this time putting it in context and time sequence. Sleep and dreams will help turn the new memory into a permanent one.

Susan, in her "child" memory state feels horrible wriggling worms inside her stomach. She senses them, and the adult Susan makes the connection to fear experiences. She "tells" the "child" that she is not bad, and is safe now. The "child" feels relieved, but wants the "worms" out. Unconsolidated memory is being integrated. Susan, using her imagination, surrounds the child with warm light. The child likes the magic. Susan talks about how there was no one there for her when she was growing up, no one to talk to her or comfort or protect her. She feels angry, then sad. She wonders if her mother had been abused and neglected too. She is sharing her emotional experiences and her thoughts with me. She feels understood. Our eyes meet in a long gaze as

she drinks in my response. New pathways are being formed from the new experience. A week later, Susan tells me she felt loving towards her inner child and also her own daughter for the first time, and enjoyed playing with daughter.

Hakomi and Attachment

There are many therapeutic methods one can use to work with attachment issues. Long-term Hakomi psychotherapy is a particularly effective modality for clients wishing to develop the characteristics of a secure attachment. This is because of the emphasis on loving presence, contact and attunement, accessing the unconscious through mindfulness, and working with the core beliefs and child parts that carry the attachment imprints. There is an understanding of attachment patterns through the character map, and provision of missing experiences when the client has the relevant attachment “circuitry” open and available for corrective change. Working within the Hakomi principles will allow for the experience of trust and safety, which is at the center of a secure attachment.

The Hakomi approach and method of psychotherapy was developed in the United States by Ron Kurtz and his colleagues in the mid-1970s, and was named Hakomi in 1980. Ron Kurtz continued to develop the method, taking a keen interest in the latest attachment and neurobiological research. “Hakomi” is a Hopi (Native American) word meaning, “How do you stand in relation to these many realms,” or more simply “Who are you?” The Hakomi Institute was founded to promote the teaching and growth of Hakomi. The theory and practice of Hakomi draws on a wide range of sources. Hakomi has integrated knowledge and skills from psychotherapies that were developed earlier: Reichian, Bioenergetics, Gestalt, Focusing, Eriksonian Hypnosis, Neurolinguistic Programming. Body therapies have also contributed, including Feldenkreis and Structural Bodywork.

The thinking behind Hakomi is in line with the changing paradigms evident in medicine, physics, and other sciences. There is a shift towards including interdependence, mutuality, consciousness, fields of influence, spiritual dimensions, multiplicity, and uncertainty. Inspiration has come from Buddhism and Taoism with the honoring of non-violence, going with the flow or process, and recognizing loving presence and compassion as healing forces in themselves. Hakomi thought has also been influenced by general systems theory, which sees individuals as self-organizing systems that spontaneously self-correct and contain

their own blueprints for growing and becoming.

As the work has evolved around the world, the psychotherapy of Hakomi has been through various name changes, including Hakomi Body-centred Psychotherapy, Hakomi Body-inclusive Psychotherapy, Hakomi Experiential Psychology, and Hakomi Integrative Psychology. In diverse international locations, different titles may be used depending on the local context. Practitioners of Hakomi Integrative Somatics, developed by Pat Ogden, have developed a specialty area, particularly working with trauma resolution, and have formed their own independent organization.

In psychotherapy, the focus is on assisting the person to discover and explore his or her own self-organization. People can gain an understanding of themselves that is not just the conscious, intellectual knowledge, but is the awareness of the deeper, unconscious aspects of self. This includes core material that is composed of beliefs, nervous system patterning, sensations, memories, images, emotions, and attitudes about self and the world. Core material shapes our patterns of behavior, our bodies, our experiences, and is mainly unconscious. Core material that is inhibiting in one’s life can be transformed in Hakomi psychotherapy to allow more freedom and satisfaction. Psychotherapy becomes part of the journey the person takes in their own growth and unfolding of potential.

There is now a greater understanding of the emotional, unconscious, brain-to-brain communication that occurs in relationship. It is this communication that is so influential in forming attachment templates, and it is this resonance that provides an essential corrective experience for developing new attachment “circuits.” In Hakomi, the personhood of the therapist is seen as vital to the success of the method. Students are encouraged to develop their own therapeutic and compassionate qualities, study their core beliefs and character patterns, and embody the principles in their work. The therapeutic process is enabled by the personal attributes of the therapist, the living of the principles in the therapy encounter, the skills, techniques, and knowledge of the Hakomi method, and the establishment of a therapeutic relationship and container.

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