

**THE HUNGRY GHOST: Understanding Addiction from Heroin to Workaholism**

**Addictions and Mental Health Division  
Integrated Conference**

Dr. Gabor Maté  
Salem, Oregon  
May 26, 2010

What is addiction, really? It is a sign, a signal, a symptom of distress. It is a language that tells us about a plight that must be understood.

Alice Miller  
*Breaking Down the Wall of Silence*

The meaning of all addictions could be defined as endeavours at controlling our life experiences with the help of external remedies... Unfortunately, all external means of improving our life experiences are double-edged swords: they are always good and bad. No external remedy improves our condition without, at the same time, making it worse.

Thomas Hora M.D.  
*Beyond the Dream: Awakening to Reality*

“Action has meaning only in relationship and without understanding relationship, action on any level will only breed conflict. The understanding of relationship is infinitely more important than the search for any plan of action.”

J. Krishnamurti

**Addiction**

Any repeated behaviour, substance-related or not, in which a person feels compelled to persist, regardless of its negative impact on his life and the lives of others. Addiction involves:

1. compulsive engagement with the behaviour, a preoccupation with it
2. impaired control over the behaviour
3. persistence or relapse, despite evidence of harm
4. dissatisfaction, irritability or intense craving when the object—be it a drug or other goal—is not immediately available.

**Models of Addiction**

1. Choice
2. Disease model: genetic--
  - a., the evidence
  - b. what it misses
  - c., “concurrent disorders”
3. Biopsychosocial

**Dependence cf. Addiction****The Universal Addiction Process**

1) A person who has been diagnosed with a psychoactive substance disorder is at a significantly higher risk than is the general population to develop one or more of the addictive disorders.

- 2) Biological relatives also at greater risk
- 3) Common pathways of neurobiological activity, structure and development
- 4) Similar premorbid patterns of psychiatric disorders

5) People with other disorders, e.g., bulimia, sexual addiction, gambling more likely to develop psychoactive substance disorders

**“Concurrent Disorders”**

ADHD  
 Depression  
 Anxiety  
 PTSD  
 Social Phobias

Personality Disorders  
Bipolar Illness

### **The Brain Circuits of Addiction**

1. Opiates: Reward/Pleasure/Pain relief
2. Dopamine: Incentive/Reward/Motivation
3. Emotional Self-Regulation and Impulse Control
4. Stress Regulation and Stress Response

### **How the human brain develops**

- a. Biology does not equal heredity, physiology is not ruled by genetics: epigenetic influences
- b. Neural Darwinism
- c. The orbitofrontal cortex: it's role, and how its development is influenced by the psycho-emotional environment
- d. Attunement in brain development
- e. The hereditary component: sensitivity; predisposition does not equal predetermination

*The necessary condition for all the brain circuits discussed above is access to a consistently available, emotionally stable, non-stressed nurturing parental care giver*

“Human connections create neuronal connections.”

(Dr. Daniel Siegel, a founding member of UCLA’s Center for Culture, Brain and Development.<sup>i</sup>)

“For the infant and young child, attachment relationships are the major environmental factors that shape the development of the brain during its period of maximal growth . . . Attachment establishes an interpersonal relationship that helps the immature brain use the mature functions of the parent’s brain to organize its own processes.”<sup>ii</sup> (Dr. D. Siegel)

“At any point in this process you have all these potentials for either good or bad stimulation to get in there and set the microstructure of the brain.”<sup>iii</sup>

(Dr. Robert Post, chief of the Biological Psychiatry Branch of the [U.S.] National Institute of Mental Health )

“[An] abnormal or impoverished rearing environment can decrease a thousand fold the number of synapses per axon [the long extension from the cell body that conducts electrical impulses toward another neuron], retard growth and eliminate billions if not trillions of synapses per brain, and result in the preservation of abnormal interconnections which are normally discarded over the course of development.

. . . environmentally induced deficits include a reduced ability to anticipate consequences or to inhibit irrelevant or inappropriate, self-destructive behaviours, and humans and other animals demonstrate severe disturbances in all aspects of social, emotional, expressive and perceptual functioning.”<sup>iv</sup>

(Dr. Rhawn Joseph, brain researcher)

### **The biology of loss:**

- a., intrapartum stress
- b., early separation: rats, monkeys
- c., postpartum stress
- d., childhood abuse and adversity

### **Genes and epigenetics**

**Dislocation:** the social basis of addiction  
the addicted society

**The Peer Factor** (another important pathway to disordered attachments and addiction)

### **Stress (addictions as stress relievers)**

### **Implicit Memory**

“...when people are influenced by past experience without any awareness that they are remembering.”

“[The] implicit effects of past experiences shape our emotional reactions, preferences, and dispositions—key elements of what we call personality...”

(Dr. Daniel Schacter, *Searching for Memory: The Brain, The Mind and The Past*)

- 1) Emotional memory
- 2) Template for world view
- 3) Template for relationships
- 4) Body memories and responses
- 5) Priming

### **The Addiction-Prone Personality**

- Chronic emotional distress, conscious or unconscious, not related to specific situations
- Poor self-regulation
- Impaired impulse control
- Sense of deficient emptiness
- Incomplete differentiation (functional vs. genuine)

**ADHD**: a major risk factor for addictions

### **Addiction and Freedom of Choice**

The neurobiology of choice

The psychology of choice, implying resilience vs. defendedness

### **The Three Primary Brain Defenses**

1. Emotional shutdown
2. Divided attention (dissociation)
3. Detachment

### **Healing Addiction: The Ecology of Recovery**

1. Compassionate Curiosity
2. Mindful Awareness: the Impartial Observer (see below)
3. The External Environment: triggers, stressors, supports, structures
4. War on Drugs or War on Drug Addicts? Know Thine Enemy.

**:Goals of treatment: recovery**

Sobriety cf. abstinence

Harm reduction: techniques

**The Four Compassions**

Basic: Emotional

Understanding

Recognition

Possibility: healing

neuroplasticity

**Identification cf. Empathy**

**The Island of Relief:**

Unconditional acceptance

Working with judgments

Mindfulness, bare attention

Being triggered

The five modes of stopping and calming: Recognition  
Acceptance  
Embracing  
Deep looking  
Insight

**The Role of Conscious Awareness**

- a. In the therapeutic relationship
- b. In healing

## **Addiction and the Spiritual Quest**

Spirituality cf. religious belief  
Two meanings of spirituality

*“All problems are psychological, but all solutions are spiritual.”*

Thomas Hora, M.D.

## **The Twelve Steps Revisited**

- What's valuable
- What's missing

## **Families and caregivers**

---

<sup>i</sup> D. Siegel, *The Developing Mind: Toward a Neurobiology of Interpersonal Experience* (New York: The Guildford Press, 1999), 85.

<sup>ii</sup> *Ibid*, 67 and 85.

<sup>iii</sup> quoted in R. Kotulak, *Inside the Brain: Revolutionary Discoveries of How the Mind Works* (Kansas City: Andrews and McMeel, 1996).

<sup>iv</sup> R. Joseph, "Environmental Influences on Neural Plasticity, the Limbic System, Emotional Development and Attachment: A Review," *Child Psychiatry Hum Dev* 29(3) (Spring 1999): 189–208.