Suffering: Its anatomy, physiology and mystique demystified from the Nondual Medicine Perspective.

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„Every person should know, that from the mind, and from the mind only, arise our pleasures, joys, as well as our sorrows, pains, grief, suffering, and tears. All these and other emotions come from the mind and only from it." – Hippocrates

Abstract

In this article I briefly describe the cognitive neuroscience and learning theory of suffering as the basis for an effective Cognitive-Behavioral intervention. The reader is introduced to concepts of Nondual Medicine. This article also touches on the evolution of the work of Dr. O. Carl Simonton, a radiation oncologist and the pioneer of mind-body oncology, in addressing physical, emotional, spiritual and existential suffering in cancer patients and their loved ones. Some of the presented material is hard science, some is hypothesis and theory. Some material is a new (but timeless) paradigm going beyond words and conceptual knowledge, something that needs to be experienced but points beyond both that experience and the experiencer, to what I've named here nonduality and unconditioned awareness.

The Case

Jason was a 38-year-old neurosurgeon with a relapse of Acute Myelogenous Leukemia and was in the third week of a bone marrow transplant. He was exhausted physically, emotionally and spiritually. The diagnosis of malignancy was for him (like for most) an existential shock. Chemotherapy was a challenge and – despite an initial relatively good prognosis – he recently learned that the disease had come back. Bone marrow transplant was his chance for a cure but it also had significant risks. Still, he was considered "lucky" that, despite his complex ethnic background, relatively quickly a matching donor was found. Now he was isolated in his room to avoid the risk of infection because his own immunity was practically non-existent until the new marrow engrafted and started production. He missed his children, didn't have energy to read, was tired of TV and just a few moments ago he exploded with anger at a young oncology fellow who was checking on him and "dared" to put her stethoscope on his night stand.

The staff sympathized with him; they understood that the young doctor had made a "terrible" mistake. They found the patient's response absolutely justified in the face of the young doctor's "rude and insensitive" behavior. They had been coached by the hospital psychologist to accept that the surface of that nightstand was the only thing the patient could still control and therefore should be protected. The entire staff empathized with the patient, who gradually was losing control of more and more things in his life: his profession, his family, and eventually also his own bodily functions. The staff understood the imperative to keep the few pictures and personal items he had on the night stand in the exact order that was significant for him. They all understood that the source of his suffering was his inability to control his life. The idea that his need for control and insistence in asserting it was the source of his suffering sounded heretical. This heresy, however, was the only avenue for Jason to free himself from suffering at that time.

The ABCD of Suffering

After he calmed down, Jason no longer blamed the young doctor for his outburst.. He was a veteran of *Beat the Odds*® – a comprehensive survivorship program for cancer patients and their families that was inspired by the work of Dr. O. Carl Simonton and utilizes the cognitive-behavior approach, Rational Behavior Therapy (RBT), developed by Dr. Maxie C. Maultsby. Jason found it very helpful to not only take responsibility for his own emotions but to realize that it was his own thoughts and beliefs that fueled his feelings. He also knew that his knee-jerk response a few moments ago was an emotional habit the training had called "an attitude".

Maultsby had taught throughout his psychiatric practice that "with our thoughts, beliefs and attitudes we create, maintain, and eliminate all our emotional feelings." It was not a new insight. Twenty-six hundred years earlier Buddha said: "We are what we think. All that we are arises with our thoughts. With our thoughts we make the world." Similar statements appear in the Bible, such as: "As I think in my heart so am I." (Proverbs 23:7.) In the Talmud we read, "We don't see things as they are. We see things as we are." Shakespeare's Hamlet possibly puts it most beautifully when in the second act he says: "There's nothing either good or bad, but thinking makes it so." Albert Ellis, the father of cognitive therapies, credited Epictetus for inspiration and frequently quoted: "We are not disturbed by things, but by the views which we take of them."

People commonly call an *emotion* what they *feel*. But what we feel is just a part of the whole neurophysiologic phenomenon of emotion and consists of: perceptions (A), cognitions (B), emotional feelings (C) and physical behaviors (D). Ellis formulated the ABC model of human emotions, in which emotional feelings (C) are the consequence of (B) - our cognitions (thoughts, beliefs, attitudes, opinions, ideas, and preferences) about an activating event (A). In this model events (A), do not upset (C) us. We upset (C) ourselves with our cognitions (B) about the events (A). These emotional feelings in turn motivate us to act in a certain way (D). (Maultsby 2008, Maultsby 2012). In this model, to be specific, the feeling part (C) of emotion we call an "emotional feeling" (as opposed to a physical feeling like touch, pressure, hot, cold etc).

While the others derived these insights from observation, spiritual revelation, introspection, and/or philosophical insight, Maultsby derived his quite radical insight from the anatomy and physiology of the brain. (Maultsby 1984, Wirga 2002)

Modifying Ellis' ABC to an ABCD model of emotions (Maultsby 2008, Maultsby 2012) would look like this:

A. Activating event (what we perceived happen, what we saw, heard, etc.)

B. Our sincere thoughts, **B**eliefs and attitudes about that activating event

C. The emotional feelings that we experience as the **C**onsequence of our thoughts, beliefs and attitudes

D. The action that we take as a result of the event. (What we **D**o.)

Because we always think (when awake), we always have accompanying emotions specific to the thoughts we have in **B**. If we believe in **B** that **A** was *positive* for our comfort and survival, we will experience *positive* emotions (joy, pleasure, happiness, love) in **C** and we will be motivated to move towards its source in **D**. The opposite is true for *negative* thoughts in **B**; when we experience *negative* emotions (anger, fear, disgust, hatred) in **C**, we will be motivated to avoid the source or destroy it in **D**. We also frequently experience very healthy *neutral* emotions (calm, peace of mind, equanimity) in **C** when we think in **B** that the situation is *neutral* for our comfort and survival, and these neutral emotions then motivate us to maintain the experience in **D**. In using the terms *positive*, *negative* and *neutral*, we aren't judging if emotions are good, bad or so-so. We are only emphasizing their motivational direction. The capacity to experience the whole spectrum of emotions is needed for healthy functioning. However, the prolonged experience of negative emotions and related stress is unhealthy and may have adverse effect on the biological course of a physical illness like cancer or cardiovascular diseases.

Truly adopting the ABCD model results in affecting the entire life of a person. Seeing our circumstances as the cause of our emotions is contrary to this teaching. In its basic practice we don't say "it upset me," or "he made me angry," or even "she made me happy." If events and life circumstance were the source of our emotional suffering, then no psychotherapy could help as long as the circumstanced don't change. And in order to feel better we would need to change everything and everybody that "causes" us to feel bad, and keep them under our constant control. Full embrace of RBT requires from us that we take full responsibility for our emotional feelings and that we create them with our thoughts, beliefs and attitudes. This truly means "owning our emotions". This also gives us the freedom to change them and RBT gives us directions for how to do it.

The Neuroscience of Emotional Suffering

So, Jason knew that his cancer and its treatment didn't scare him and the young doctor wasn't the cause of his anger. Jason learned and deeply accepted that his worry and fear as well as other emotions were not caused by cancer, its treatment or other people but by his own thoughts, beliefs and habitual attitudes. As a physician he was fascinated that the therapy he participated in during the *Beat the Odds*® program was consistent with his knowledge of the anatomy and function of the nervous system.

In the program he further learned that emotional feelings are hard-wired into our nervous system. And that is the reason that, regardless of our culture, ethnicity, or upbringing, we all experience such basic emotions as fear, joy, anger and disgust the same way. He also had enough insight to know that the emotions he was dealing with were primarily fear and worry.

He easily recognized in himself the physiological cascade of fear: immediate startle response; then freezing, slowing of the heartbeat, goose bumps; then the sympathetic nervous system kicks in and we experience increased blood pressure and heart rate, pupil dilation, and we become pale, have cold sweats, and of course stress hormones are release. These are the autonomic nervous system responses. Related to them are sensations we call emotional feelings (C in Emotional ABCD). This physiological cascade of fear is mediated by the stimulation of the small cluster of nerve

cells deep in the brain called the central nucleus of the amygdala (cna), which receives multiple connections from the thalamus and neocortex and is responsible for emotional processing. For as long as the cna is stimulated, we experience the above symptoms of anxiety – that is the hard-wiring of fear (LeDoux 1995).

Any sudden strong stimulus can cause an immediate startle response, but whether the cascade of fear is going to further develop depends primarily on what we think about the stimulus. For example, when Jason was anticipating a phone call from his colleague that could contain negative information, he would be startled hearing the phone ring. But as soon as he realized that it was his daughter telling him how much she loved him, the fear would not develop any further because the cna would not be further stimulated. However, the opposite was true when indeed it was his colleague's office calling and the secretary announced, "Could you please hold? The doctor wants to talk to you about something important." While on hold, his mind would habitually assume the worst and start thinking, "It must be something terrible. Certainly I am going to die soon and suffer in the process. My family won't survive without me."

Jason could try to focus his attention on other things and distract himself. But it is difficult, if not impossible, to ignore the fact that you have a life-threatening leukemia while undergoing a bone marrow transplant. But how, in such circumstances, can one turn off the cna and stop creating fear?

Jason knew that all intense or sudden stimuli (A in the ABCD of Emotions) quickly travelled first from the sensory organs to the sensory thalamus and from there were relayed to excite the cna – so there was not much that he could do to prevent the startle response. He also knew that the rest of the fear cascade was fueled by the cna receiving input from the cortex (the thinking part of the brain).

He knew that as long as he was thinking scary thoughts (B) about his leukemia, its treatment and his ability to get well, for that duration he was going to stimulate the cna and keep experiencing fear (C). The only thing he could change was his thinking (B), not the fact of having leukemia. He knew from cognitive neuroscience that the emotional responses were hard-wired and that emotional learning and re-education were stimulus learning – learning to give a healthier meaning (B) to the stimulus (A) so one can feel better emotionally in (C). For example, Simonton tirelessly working to dispel the unhealthy and false understanding of cancer as a universally deadly disease that consumes the person from the inside, and instead was educating his patients that, to the contrary, our healthy immune cells have the ability to destroy or devour cancer cells. He also encouraged his patients to consider that the meaning of cancer is about bringing more joy to life and focusing on what can be done to improve the quality of the present moment.

The Re-Education of Suffering

Since the very beginning of his work, Simonton (1978) had been focusing on patients' belief systems and helping shift these beliefs in a healthier direction. It was not, however, until the 1980's that he formally introduced cognitive-behavior therapy in the form of Maultsby's RBT. The unique quality of Maultsby's approach is that, unlike other cognitive-behavior therapies, it clearly defines what healthy thinking is with simple five rules (Maultsby 1984, Simonton 1992).

Five Rules for Healthy Thinking (Maultsby 1984):

A healthy belief

1. is based on obvious facts, which means based on objective reality;
2. protects your life and health;
3. helps you to achieve your short- and long-term goals;
4. helps you to resolve or avoid most unwanted conflicts with others;
5. helps you feel the way you want to feel, without abusing drugs, alcohol, medications or other substances.

Healthy thinking:

- Obeys at least three of the Five Rules.
- Healthy thinking for one person is not necessarily healthy for another. Therefore, *you* (not your family, friends, or even your therapist) are the only one who can create healthy thoughts, beliefs, and attitudes for yourself.
- What is healthy thinking for you today does not have to be healthy at other times. It is therefore important that you learn the Five Rules by heart so you can apply them anytime and anywhere, keeping in mind that different situations call for different types of thinking. With time and practice, this will become a habit.
- Some of the rules may not necessarily apply to every situation or belief. However, for thinking to be healthy, three of the remaining rules are obeyed.

These rules allow us to evaluate the health value of our own thoughts, beliefs and attitudes. Every time Jason experienced intense negative emotions, he was encouraged to write down his thoughts that created his suffering. Attitudes, which are overlearned, habitual, nonverbal forms of beliefs, are therefore beyond our awareness under usual circumstances. However, in intense emotional pain, these attitudes are actively thought and therefore can be consciously processed. Then, each of these thoughts is evaluated by the Five Rules above and for each unhealthy thought, a new healthy one is formulated that would obey at least three of the Five Rules. Once each unhealthy thought has a contradicting new, healthy thought written down, the new thought is *practiced through mental imagery* by simply repeating in one's mind each of these new healthy thoughts for at least 30 seconds (Simonton, 1992; description of the *Belief Work* technique: www.beat-the-odds.org/beliefwork).

Simonton praised Maultsby's approach as an effective tool not only in addressing emotional pain but also in resolving most profound suffering related to religious, spiritual, existential or deeply philosophical beliefs (Simonton, 2001). Simonton encouraged exploration of our beliefs about our human nature, the nature of the universe or God, the nature of life, the nature of suffering, and of our purpose in life. He also encouraged the application of Maultsby's Five Rules to evaluate whether these beliefs are

healthy (with the exception of rule number 1, because in these beliefs we have no way of verifying the facts). If the beliefs turned out to be unhealthy, then we were to formulate healthier beliefs that would obey at least three rules of the remaining four.

Nature versus Nurture: Learning to Suffer

How does it happen that we end up having negative emotional feelings in situations that others don't? There are definitely genetic predispositions. With the exception of clear genetic disorders, for most people whatever is in their genes is affected by multiple environmental and internal factors through epigenetic processes which regulate which genes are turned on or off. For example, activities like laughter may up-regulate 27 genes, 14 of them related to the activity of natural killer cells which, among other things, protect us from cancer and viruses; this effect lasts at least 4 hours (Hayashi 2007). Discussing this in more detail would go beyond the scope of this article, but suffice to say that environmental, cognitive and emotional factors play a significant role in the regulation of gene transcription.

Maultsby maintains that 95% of human emotional habits are acquired unwittingly, without any conscious effort. We become conditioned in the context of the families, neighborhoods, cultures, religions and political systems in which we grow up. We develop these emotional habits in the same way we "pick up" such a complex activity as language – we don't remember how we learned our mother tongue but became quite proficient at it. We end up speaking the way people around us spoke and this way seems to us the "right" way. We may even feel compelled to correct anyone speaking differently than they do. And when we move to another city and go to college, we may notice that other people speak differently and some of the corrections we imposed on others may in fact have been incorrect. If we want to speak like them, we don't need to analyze from which family member or neighbor we picked up certain phraseology, intonation, grammar and other speech habits. It is enough if we get help identifying these habits, devise an exercise program and then practice – speaking the way we want to speak. We can increase the effectiveness of this process by practicing it in our minds. .

Imagery

Simonton first introduced imagery in his work with cancer patients on April 5, 1971. Around the same time Maultsby (1971) first published about his application of imagery as a mental practice for healthy beliefs. Soon Albert Ellis adopted Maultsby's technique, which was a stimulus for him to rename his approach from Rational Emotive Therapy to Rational Emotive Behavior Therapy (Ellis 1994).

Jason knew that it didn't matter how he acquired his emotional habits. To resolve them, he needed to identify the beliefs and attitudes maintaining them (Belief Work), formulate new, healthy ones and then practice them (Imagery). He also was focusing his imagination on desirable outcomes. For Simonton imagery was a natural process occurring in our minds all the time. He considered the content and quality of these continuous cognitions to be the key for health. He developed a very sophisticated approach to shift thoughts in a healthy direction and refined imagery exercises that were individualized to the particular style, symbolism and needs of a person. The bottom line was to imagine a desirable outcome but without attachment to it.

We do not simply forget our habits. In humans, extinction of the habit is an active process. Imagery is an excellent tool in this process of change. Practicing new beliefs through mental imagery involves such brain structures as the dorsolateral prefrontal cortex and medioventral prefrontal cortex, which supports the notion that RBT and other cognitive-behavior therapies are indeed biological therapies that are rooted in the anatomy and function of the brain (Morgan 1993; Procyk 2006; Olejarczyk 2007). As it turns out, cognitive-behavior therapies have been found to be at least as effective as medications in the treatment of depression while giving longer lasting results, being more effective in preventing relapse and having only desirable "side effects" (DeRubeis 2008).

When right feels wrong

Not only do we naturally resist the active process, which requires effort, of replacing habits that don't serve us. Resistance is even greater because changing our habits *feels wrong*. As soon as we engage in the process of imagining new, healthier thoughts that are in conflict with our emotional habits/attitudes, or when we are actually acting on these new thoughts in real life, we experience a certain level of distress. This phenomenon is present in all instances of engaging in activities (cognitive or physical) that are in conflict with our habits (either emotional or physical) and is called cognitive-emotive dissonance. It is an unavoidable stage in emotional (and physical) re-education uniquely recognized in RBT and Maultsby's psychosomatic learning theory and is a special variant of Festinger's theory of cognitive dissonance (Festinger 1957, Maultsby 1984, p. 51).

Anybody who has practiced new behaviors that were in conflict with old habits (either when changing a technique in sports, or in playing an instrument, or trying to use a different version of software, or new procedures implemented throughout the organization they work at, etc) can relate to that feeling. Similarly, for experienced drivers who are used to right hand traffic find themselves needing to drive in a country with left hand traffic, just sitting behind the steering wheel (which is on the opposite side than they're accustomed to) but even more intense when actually driving, immediately feels awkward, weird, strange, unnatural and wrong. Just imagining oneself in such a situation, in which new thoughts and imagery are in conflict with well-established habits and perhaps strongly held beliefs, may elicit cognitive-emotive dissonance. In order to drive safely they need to ignore feeling wrong and continuously think new (in this situation healthy) thoughts of right side driving. They respond to new meanings for the traffic cues and drive in a new, life-protective way. However, if during their first time driving they start feeling *right*, that would most likely indicate they had reverted to their former driving habits and were driving deadly *wrong* for a left hand traffic system.

For Jason, this understanding about the non-personal, automatic resistance to new healthy thoughts was a revelation and helped him understand why he resisted these new ideas. He was also excited to learn that the process of cognitive dissonance recognized neural representation, namely that the negative affect (feeling wrong) and related autonomic arousal were mediated by the anterior insular cortex, and the cognitive conflict by the dorsal anterior cingulate cortex (van Veen 2009). Furthermore, the latter brain structure interacts with the same structures that are involved in imagery and the practice of new beliefs and behaviors (dorsolateral prefrontal cortex) to resolve the dissonant conflict and related distress (Carter 2007). It's important to note that once we make the new decision and act on it, we then engage in a rationalization process to justify our choices.

Almost from the inception of the cognitive dissonance research it was observed that efforts to preserve a person's self-concept and self-justification were based on reducing dissonance when engaging in actions in conflict with their view of the self. Furthermore, it was speculated that, depending on the quality of the conditioned construct of the self (well-grounded versus fragile), people may either calmly take responsibility for their actions and mistakes or engage in *frantic self-justification* to defend their self-constructs. This *desperate self-absorption* distracts them from the tasks at hand in the present moment (Aronson 1999). Interestingly, the act of self-justification may be processed by different brain structures, depending on the culturally conditioned view of the self (Jarcho 2011, Qin 2911).

With the help of a Nondual Medicine therapist, Jason engaged in the search for his own self through the process called "unfindability inquiry", whose description is beyond the scope of this chapter but is in some aspects similar to a Socratic dialogue known to cognitive-behavior therapists. Although he engaged with great sincerity in a search for the existence of "his" self, he consistently discovered it could not be found—not in his head, nor in his chest, nor anywhere else. He realized that the self he was so often trying to defend was a construct of his mind. This inquiry revealed to him that his self couldn't be found and therefore there was nothing to defend. This revelation combined with his practice of radical acceptance of whatever life brings led him to the conviction that true invincibility comes from the absolute acceptance of his defenselessness and mortality.

We all insist that we want less suffering in our lives: less stress, less worry about the future, less conflict, less hunger, less pain, less living life as a rat race, less illness, less death. Let's imagine how our lives would be if we had 25% less suffering. But the problem is that we want to suffer less but still live our lives exactly as we've been living them. Clearly, these two intentions are incompatible. To reduce our suffering by 25% we would need to significantly change our lives. For a start, we are asked to consider that we are attached to our suffering (Fenner 2007a). As Simonton frequently said, "We are much more attached to our way of thinking than we are attached to life." Maultsby would say that changing our minds is the easiest thing to do but one that we resist the most. We are ready to die for our beliefs. To suffer less we need to live very differently and this, at the beginning at least, would feel very wrong, to the point that we could give up trying. However, in much the same way as we can master driving in a country with the opposite traffic patterns. We can master living with less suffering.

False Hopelessness

During his extensive medical training, Jason had never encountered any teachings about hope. He confused hope with "positive thinking" and considered the latter to be "false hope." As a result, he succumbed to *false hopelessness* (Servan-Schreiber 2009). In his medical practice, he avoided suggesting any positive expectation if there was a chance that the patient could be disappointed. It was safer (for Jason) instead to paint the worst case scenario. That of course was understandable; he had seen more than his share of surgeries that were supposed to go well but ended up in severe disability or death of the patient. False hopelessness, however, is worse than doubt because it creates such a strong cognitive-emotive dissonance to hope that it leads to the rejection of any possibility of even coming close to a desirable outcome. Since his relapse, he himself

rejected hope as a sign of scientific and personal weakness but didn't know how to deal with illness without hope. It was particularly difficult when he was waiting for a transplant, convinced that he wouldn't get a matching bone marrow because there were few donors of his genetic background. So he was greatly relieved when he learned the definition of hope presented in the program: that hope is a belief that desirable things are obtainable regardless of the remoteness of the probabilities. That meant he could believe that a donor would be found and that he could get well while also being comfortable with the possibility that it wasn't guaranteed – without attachment.

This is embracing the non-attachment to the outcome – the concept central in Simonton's more recent work and the attitude Jason was exploring and cultivating. He was doing this by focusing on the present moment and what could be done to improve its quality. He didn't have to figure out his entire future. Attachment and the resulting worry about the outcome, in fact, were detrimental to the quality of his life now. The Simontonian non-attachment means staying focused on what can be done now. It means staying caring, committed, engaged but not attached to the ways one thinks it should be. Non-attachment is different from *detachment,* which could cause being disengaged, not caring, and in its extreme cynical or sarcastic. The practice of non-attachment also asks us to not put rigid demands on specific future outcomes. The non-attached stance recognizes that the future doesn't yet exist and *radically accepts* that it may bring outcomes very different from what we expect. Non-attachment ultimately is to practice *broadening the river of life* and being open to whatever life brings without judgment or even a conditioned preference of "liking" or "not liking" it. (Fenner 2007). For most of us mortals this is a continuous work in progress, requiring practice and frequent reminders whenever we catch ourselves getting attached to particular future outcomes and the way we think things should be.

Mind-Body Oncology

Emotional factors affect us from the beginning of our lives. Maternal depression, for example, may have serious behavioral and biological consequences for the fetus and the baby (Marcus 2009). Depression is a recognized risk factor for increased morbidity and mortality in heart disease and a poor prognostic factor in post-myocardial infarction (Sher 2010). In fact, early comprehensive interventions incorporating mind-body interventions have been developed to reverse heart disease (Ornish 1998). We also have learned that depression is an independent predictor of shorter survival in women with metastatic breast cancer (Giese-Davis 2010).

Simonton was the first one to report in his preliminary pilot study that psychological interventions may have a beneficial effect on survival for patients with advanced cancer (Simonton 1981), which was met with scathing criticism. Since then there have been four randomized clinical trials that confirmed Simonton's assertion of the survival advantage of psychotherapy for cancer patients (Spiegel 1989, Fawzy 1993, Küchler 2007, Andersen 2008). As Thomas Küchler stated, psychotherapeutic interventions in oncology are not only about comforting the cancer patient, they also affect survival (Küchler 2008). Simonton warned, however, about the pitfalls of attachment to the survival outcome and emphasized that the focus of these interventions needed to be on improving the quality of the patient's life in the present moment, with improved survival being an effect of experiencing joy and resolving any arising suffering.

It has recently been confirmed that reduction in suffering with effective palliative care improves survival in terminally ill lung cancer patients and, not surprisingly, also relieves their depression (Temel 2010). Palliation also has led to less aggressive care at the end of life. So, just focusing on reducing stress and improving quality of life may have beneficial effects on health even for those who are terminally ill.

Psychoneuroimmunology (PNI)

Many mechanisms have been identified or hypothesized through which the state of mind and stress may affect physical health. Prolonged stress leads to the dysregulation of the hypothalamic-pituitary-adrenal axis and the immune, hormonal and autonomic nervous systems, which have cumulative adverse physiological consequences. This may lead to abnormal endocrine and metabolic changes, wake/sleep disturbance, release cytokines and other growth mediators, increase inflammatory processes throughout the body, stimulate oncogene expression (like BRCA1), promote proliferation of malignant cells and metastasis while slowing down their natural death (apoptosis), as well as trigger sickness behaviors mimicking depressive symptoms--all of which in the end may increase mortality in cancer patients (Spiegel 2011).

Jason knew that he could direct his mind to stop these adverse processes and turn on the opposite physiological changes that promote healing. He applied belief work, relaxation, mindful breathing, imagery, focusing on things that he could appreciate in the present moment, engaging in the few activities available to him that increased joy, as well as using other techniques and skills. He didn't know if applying these techniques would indeed improve his survival but that his emotional GPS was immediately indicating that they were improving his quality of life. Emotional GPS is a technique that recognizes that all living creatures naturally move toward a nurturing environment and away from a toxic environment if it's at all possible to do so. Humans can ignore this natural tendency and talk themselves into staying in toxic environments (personal, social or professional) and not moving towards nurturing ones by constructing stories about why they "can't," "shouldn't", or "must stay," etc. The most deciding factor about our quality of life is the environment of our minds. For Jason it required discipline and a deliberate choice of thoughts that were healthy for him.

His conditioned mind still had a tendency to create suffering, such as when the young doctor put a stethoscope on his nightstand, or when he tried to prolong conversations with his kids beyond their ability to stay focused. It was most intense when he became impatient with the pain and other physical symptoms and his isolation from the rest of the world – the times when he truly believed he couldn't take it anymore and found himself demanding from the universe that his circumstances improve immediately and permanently. His mind had the capacity to free him from this suffering effortlessly in the space of nondual, unconditioned awareness but he hadn't yet tasted that potential. As he continued to deconstruct the concepts, attitudes and emotional habits that remained at the core of his suffering, he would come to experience what Buddhist teachings call "drinking from the source of ultimate healing".

Constructing and Deconstructing A Self

The processes of acquiring the emotional habits which Maultsby described are similar to George Kelly's Personal Construct Theory, in which what he names constructs, like

Maultsby's attitudes, are not considered unconscious but rather non-verbal (or pre-verbal – indicating acquisition before the development of language). Even though we don't know the logic behind 95% of our emotional habits, we not only defend them but also cherish these habits as in our minds they define our sense of self. Unlike Kelly, who recommends the systematic exploration of a person's constructs, we focus instead on deconstructing them as they arise and cause suffering. Some constructs, such as those connected to pride and self-esteem, set us up for suffering down the road when, for example, our performance doesn't match our ideal for it. Following the teachings of Ellis, we would rather cultivate unconditional self-acceptance (USA) that is not dependent on our performance, achievements, possessions, other people's opinions, family or association. Accepting oneself unconditionally means accepting that "just the fact that I exist is proof that I am a valuable human being – just as valuable as everybody else."

Our brains seem to be naturally propelled to construct a self. The neuroscientist Antonio Damasio states, "When selves do not occur within minds, those minds are not conscious in the proper sense." (Damasio 2010). It seems that we first need to become "conscious in the proper sense," i.e., construct a relatively healthy self that can eventually point us beyond it-self. Thus we need a relatively well-developed self and mind in order to deconstruct them in a healthy way to transcend our conditioned thoughts, selves and minds, which foster the possibility for immersion in the liberating non-dual space beyond them.

Like many philosophers, gurus and teachers before him, Maultsby frequently taught that happiness is our birthright. Jason related to the analogy of a healthy baby who had had a good nap, favorite meal, clean diaper and all the needed hugs and love. He could remember his own children being totally satisfied with *what is*, being content with things just as they are, just blissfully enjoying the present moment and being totally immersed in it. They were not thinking about plans for tomorrow, or needing to be doing something else, or needing the world to be different, or wanting to know more than what they already knew, or having more understanding or knowledge. Such a baby is absolutely content with life as it is; nothing is missing, there is nothing that needs to change, everything is the way it should be and the baby and its universe are complete.

This is such a great contrast to the conditioned adult. We are conditioned, for example, to continuously wait for what the next moment will bring. When focusing on waiting, dismiss the value of what actually *is* in the moment and as a result cannot fully live in the present. We live in wait for something next but when this "next" comes, we are already waiting for some other "next", never satisfied with what the present moment brings. We are conditioned to judge everything by the criterion "I like it, I don't like it." This attraction and aversion are the sources of our suffering. When we don't like something, our minds focus on rejecting it, and when we like something we frequently want more of it, we want it to last and worry that it won't, which gets in the way of fully enjoying it, Peter Fenner takes this a step further by saying that even if our suffering was guaranteed tomorrow, worrying about it today and ruining the present moment with that worry is *crazy*. Of course it is not psychotic crazy but just emphasizes how deeply and irrationally we are conditioned. It makes no sense to ruin a perfect day today just because tomorrow's suffering is inevitable.

We constructed not only our selves but our universe (and everybody and everything in it), as well – we have clear ideas on what should and shouldn't be happening and suffer if the universe doesn't follow our expectations. Buddha's Dhammapada begins with: "*We are what we think. All that we are arises with our thoughts. With our thoughts we make the world."* This fragment beautifully reflects the process of constructing ourselves and our world. A few verses further we read: "*Speak or act with a pure mind, and happiness will follow you, as your shadow, unshakable."* This pure mind is free of judgments, immersed in unconditioned awareness, the space beyond the conceptual, conditioned mind in which all suffering dissipates, where we can rest without the need for things and ourselves to be different than they are. Attaining this pure mind is the goal of many spiritual practices but it is always within our reach. Simonton's and Fenner's approaches to this attainment are naturally synergistic, as pointed out in a recent personal account (Doerfler 2010). It seems that Simonton's work helps us clear our minds from unhealthy clutter, so the unconditioned mind can more easily radiate through all aspects of our lives. The constructs of Simontonian therapy paradoxically also provide a bridge to nondual awareness and allows resting in that space without irrational fears of going beyond the conceptual mind and staying calm without the usual points of reference. This possibility of resting in awareness is intrinsic to our nature. In the face of suffering many patients never previously exposed to these concepts, including children and teenagers, spontaneously deconstruct unhealthy attitudes and achieve unconditioned peace of mind.

The process just described of constructing a self and its later deconstruction may be similar to the processes described in the Theory of Positive Disintegration developed by the Polish psychiatrist Kazimierz Dąbrowski (Dąbrowski 1979, Mendaglio 2008). This theory was applied by Dr Józef Binnebesel to hospitalized children with cancer and how they deal with suffering (Binnebesel 2010). What he describes as *negative disintegration,* in Nondual Medicine would be considered *unhealthy constructs*. These might include being "abandoned" in the hospital, considering illness as "punishment for being rude" or "because Jesus had enough of me," or concluding "God has to be a sadist." Binnebesel also gives examples of positive disintegration in these children that, from the perspective on Nondual Medicine, would be considered deconstructive in nature. These might include resolving resentment by recognizing one's own and one's parent's defenselessness; experiencing Presence in silence; radical acceptance of the suffering and the bodily changes caused by treatments; and finally consciously finding respite in the present moment rather than thinking about future inevitable pain.

Non-duality, Religion and Mysticism

The New Testament John (1:1) starts with a statement that could be considered pointing to nonduality: "In the beginning was the Word, and the Word was with God, and the Word was God." Further it is written "The Word became flesh" and Jesus incarnate unifies divine and human nature and transcends death. The mystery of the nondual paradox of suffering and God's mercy is at the center of Christian teaching, as reflected in Jesus' death on the cross.

Jason had a so called "Catholic upbringing" but had no proper Catholic guidance, having experienced not much beyond demands to adhere to strict rules with guilt being used as a main motivating force where prayer consisted of repetition of strings of words he didn't understand but at least rhymed. , With significant part of his childhood spent in Church

participating in rites he couldn't relate to, he eventually grew to view his religion critically. He could not understand why, if God loved humans, there was so much suffering on this planet, which he so acutely and all too frequently witnessed in his work. Any religion can be used as a justification for holding unhealthy and sometimes clearly harmful beliefs. In Catholicism the most common are that disease or tragic events are punishment for our sins; that we deserved it somehow; that suffering now helps us build a better afterlife; or that it is a blessing because God sends us only such crosses as we can bear. Patients are frequently placated by well-meaning but misinformed coreligionists. These and similar constructs need to be gently explored and, if needed, effectively addressed (Leonard 2010).

Facing his own suffering now, Jason didn't try to conceptually understand the meaning of his situation. He was working on radically accepting it without demanding that it all makes conceptual sense. So he was surprised at how the words of Pope Benedict XVI resonated with him: "It is not by sidestepping or fleeing from suffering that we are healed, but rather by our capacity for accepting it, maturing through it and finding meaning through union with Christ, who suffered with infinite love." Jason found peace in this statement and also accepted that he still didn't understand, or need to, the meaning of his or Jesus' suffering. He was reminded that "whoever loses his life for my sake will find it" (Mathew 10: 34-39).

Mystics in many religious traditions sought and/or experienced unity with God. Some of them wrote very evocative and sensual poems about this union (such as Rumi or John of the Cross). To fully trust God and authentically fully dedicate one's life to God, regardless of the religious context, requires the dissolution of an illusionary sense of self, the conditioned *ego* that separates us from the Divine. This dissolution of one's self-identity is also what happens in nondual deconstruction.

Our conditioned judgements about what is happening: "I like it", 'I don't like it", "good", "bad," "This shouldn't be happening," "It can't be this way," etc., separate us from what is. Suffering comes from the separation from what is true in the moment. Jason began to see this separation as the disconnection from God. The resolution of suffering is the opposite of separation: finding unity with what is and fully accepting what happens from timeless moment to timeless moment. For him it was unity with God. He found it interesting that the word "religion" may have been derived from the Latin "re-ligare", where "ligare" means "to bind, to connect." Therefore "re-ligare" would mean "re-connect" to something that we are already in union with.

Acceptance of our conditioning

Jason was also working at resolving his guilt and shame about his angry outburst at the young oncology fellow. He felt particularly bad because he liked her and remembered his own challenging times in residency and fellowships and dealing with difficult patients. Now he had become a difficult patient and a challenge to this young woman. His compassion towards her and recognition that she didn't know of his control issue quickly resolved his resentment. He also was working towards relinquishing the need to control things outside himself and accepting that indeed he only could control his own mind and emotions. Even this control was limited. Compassion towards himself and recognition of his own limitations and conditioned nature helped him get over his guilt and shame.

He was also sometimes consumed by conflict about his future -- which options to choose and which paths to pursue. We think about our future so much. We make plans, try to anticipate problems, avoid trouble and seize potential opportunities. This frequent focus on the future creates the illusion that it is solid, that out there in front of us there are paths to choose, doors to open, hills to climb. Imagining the future and the past involves similar neural structures, which means that imagining undesirable outcomes may have the same effect on us as if they in fact have already happened (Schacter 2009).

In reality, the present moment is the only time we can suffer or resolve suffering. The present moment is *it*. This is it; there is nothing more but it and now. Just remember the plans you had 20 years ago and where you are today. Most likely your life today is very different than what you had imagined then. There are no paths to choose. The only paths that we can speak of are being created by us right now while we ourselves are being transformed in the process. We are so busy waiting for the *promises* of the future that we dismiss the priceless value of *the gifts* of the present.

We also create in our minds conditions for our own happiness. We think that when we achieve, own or accomplish certain things we will be happy. Unconditioned awareness helps us realize that in the present moment we don't need anything more that we already have, which is the only way to be satisfied. Also, there is no happiness outside of the recognition of being happy in the present moment. The more we appreciate the moments of our lives and the more we learn to rest in and enjoy the present moment, the more we experience both happiness and peace.

But it is not easy. In the Western world we are conditioned by our culture to always strive for more and better. This leaves us always dissatisfied with what is. Recognizing that we are all conditioned differently – other cultures are far less entranced by progress, getting ahead or personal success – may improve our tolerance and understanding of cultural differences while appreciating the sameness of the essence of our being. Similarly, it is easier to forgive ourselves and others when making mistakes by recognizing that they arise from unwitting conditioning. We not only become more compassionate but it is also easier for us to resist temptations to yield to old unhealthy habits by recognizing that the urge to act is not a "call" of our nature but a result of conditioning.

We are also conditioned to think linearly and our logic has little tolerance for apparent contradictions. So it is difficult for us to dance with life's paradoxes and accept Niels Bohr's statement that "profound truths [are] recognized by the fact that the opposite is also a profound truth" (Wurmser 1995).

It is also important that we honor our conditioning in the sphere of personal philosophy, religion, spirituality or existential stance. The foundational beliefs about human nature, the nature of the Universe and its origin or God, the meaning of suffering, illness and death, and an understanding of our purpose or destiny have a profound effect on all aspects of our lives. We rarely are aware of their content, not to mention their influence on our health (Simonton 1992).

Deconstruction

Shinobu Kitayama et al describe how *self comes to mind* in different cultures in relation to social, cultural and religious contexts. This contextual conditioning in turn influences which areas of the brain are aroused or which genes are activated. So similar everyday tasks and decisions may be modulated by different brain structures depending on our conditioning. Cultural neuroscience also postulates that the self may be located and organized differently in different cultural contexts, reflecting particular themes or values in emotional learning/conditioning, e.g.: independence where there's a high value on individualism, in contrast to interdependence where collectivism (family, society) is most valued (Kitayama 2010).

When we are growing up and most prone to conditioning in our early lives, we are at the mercy of our environment. But with age, the most important environment we have is the one of our minds. The language we use to describe the self and the Universe is the environment needing particular attention. Pavlov stated that for humans, words are an entirely real stimulus; they signal and substitutes for every other stimulus and elicit every kind of reaction other stimuli elicit (Volgyesi 1954). Healthy semantics – paying attention to the health value of the words in our own self-talk ("have to, should, can't, must, terrible failure", etc.) – is a relatively simple way of providing a healthy mental environment (Wirga 2008).

Jason noticed his attachment to always trying to understand what was happening to him, to always being able to explain it in physiological terms, and to finding meaning in it. He was particularly pleased to discover that many of his emotional and mental experiences had neurological substrates and processes, and that healing could be explained by an understanding of immunity and gene repair. But he also recognized that these healing processes had occurred in all our ancestors independent of any idea of their existence.

Hippocrates believed that healing is the natural tendency of all organisms and it should not be interfered with in order not to do harm. In the initial quote for this chapter he originally used the word "brain" rather than "mind." But in his opus "Sacred Illness" he explained that the brain is the *interpreter of consciousness* and as such the use of mind in healing is justified. Hippocrates lived in a culture in which spirit, mind and body were inseparable, and thus engaging one of these would inevitably affect the others. This way of thinking is mirrored in Asian traditional medicine but only recently is being considered in Western healing practices. Jason agreed with Hippocrates's assertion that every person, not just a few physicians or scholars, should know the things he was learning about the mind and the brain. This would be a way to decrease suffering in the world.

We have come to see in this exposition that working with habits of the mind is the only way to free ourselves from, or at a minimum reduce, suffering. And that the only suffering that we can influence is the suffering we experience in the present moment. Conditioned responses to quickly assess our outer and inner environments serve us, just as they do all animals, to avoid threats or toxic situations and move towards safe, nurturing conditions. Of all the creatures on this planet only humans, thanks to their minds, can transcend their conditioning to experience unconditioned, nondual awareness, the space which is always available and always free of suffering now.

While Jason was is several weeks in isolation, undergoing and recuperating from the bone marrow transplant, he focused when he could on resting in the present moment, in the space of nondual awareness. He noticed that he couldn't, in that space, re-experience suffering when recalling times of anguish. He was surprised that just by resting in a space of aware openness and stillness all constricting emotions and the constructs fueling them melted away like snowflakes falling into warm water. Worries about the future and resentments, guilt and shame from the past were dissolving effortlessly in this space. With fewer constructs cluttering his mind new insights and wisdom flowed through him, allowing him to respond to arising challenges relatively effortlessly and effectively. He was able to make decisions in areas that previously had stymied him, ranging from his diet regimen, to how to deal with his children's difficult questions, to his spiritual explorations on *youtube*. He was healing in a truly holistic sense. He also was surprised to notice that he didn't need the construct of hope to lean on. He had come to understasnd the meaning of Nikos Kazantzakis' epitaph: "I hope for nothing. I fear nothing. I am free."

Characteristics of Nondual Medicine:

- We recognize it as a new paradigm pointing towards the ever-present Presence of Nondual Awareness. This is a paradigm that goes beyond words, concepts and even experience. Therefore any definition or principle cannot adequately describe or encompass it.
- We recognize that while the mind has limitations, it is the only tool we have to transcend its limitations. It *seems* that humans are the only species that can transcend their own conditioning and it *seems* to happen thanks to the structures and nature of minds, however limited or limiting they may *seem*.
- The primary goal is freedom from suffering in the present moment by learning to rest in nondual, unconditioned awareness. This practice invites radical acceptance of what is, now, including the suffering, and broadening the river of life to include whatever may happen, in contrast to trying to eliminate perceived sources of suffering or to control events.
- Unconditioned awareness and optimal health are natural states of being. Systems have an intrinsic tendency to self-organize. Healing is a natural tendency of all life. Obstacles to unconditioned awareness and healing are conditioned habits that tend to be unwittingly and vicariously learned cognitive-behavioral constructs. Paradoxically we can point to the space of unconditioned awareness through conscious cognitive processes that can help us deconstruct obstructive constructs and progress beyond words and conceptual knowledge.
- Death is not an enemy to fight against. Death is not considered a failure. Becoming ready to die at any moment is an excellent therapeutic tool as the death itself is the ultimate deconstruction. A readiness to die allows us to heal and to live more fully. ("The art of living well and the art of dying well are one." Epicurus)
- Illness, pain and suffering are not enemies to wage war against. Rather, we are called to learn from them and use their presence as a stimulus to transform our life and bring to it more joy and fulfillment. Sometimes we need to sit with our suffering in order to eventually walk away from it.
- All evidence-based or non-harmful treatments are embraced.

- There is no separation between the mind, the body, spirit, interpersonal relationships, nature and the universe.
- All are invited and welcomed to be involved with the healing process: practitioners, patients, families, coworkers, trainees, institutions with their employees, communities, etc. Nobody is excluded. There is no division between the practitioner and the patient – no separation. The same nondual understanding applies to them and everything else.
- Recognizing and accepting our defenselessness and vulnerability is a way to authentic invincibility.
- Practitioners aspire to attuned, nonjudgmental relationships, balancing non-attachment with compassion, caring and kindness. They/we remain engaged, involved and committed to do their/our best in the present moment without attachment to the outcomes of these efforts. Non-attachment is quite different from detachment, which may lead to being indifferent, aloof, disengaged, withdrawn and in extreme cases cynical or sarcastic. We recognize that we have a habitual tendency to become attached, therefore we accept the practice of non-attachment as a work in progress.
- Knowledge is neither indispensable nor dispensable. Becoming comfortable and resting in the present moment without knowing, without understanding, without finding meaning, without needing to do something are essential to the therapeutic process .
- Skill at accessing unconditioned awareness is central in the practice of Nondual Medicine.
- Trust is placed in the naturally present unconditioned awareness, its gifts to the healing process, and the healing process, itself. Practitioners are the messengers and their skills, knowledge and information conveyed have inevitable limitations.
- The times of greatest suffering may be when nondual interventions could be most effective. However, especially initially, it is paradoxically easiest to practice unconditioned awareness by creating conditions and contingencies for accessing the unconditioned space (e.g., finding a quiet time and space for daily practice, listening to guided meditations, etc).
- Resting in the space of unconditioned awareness may be accompanied by many pleasant mental, emotional and physical phenomena. These phenomena are neither a prerequisite to nor confirmatory for resting in awareness. We recognize our tendency to become conditioned to these phenomena as "proof" that we're in that state of being. We neither seek them nor avoid them.
- Interventions are focused primarily on the present moment and current suffering. Primary approaches are pure listening (nonjudgmental - without validating or invalidating responses), deconstructing dialogue and unfindablility inquiry. Silence and talk are equally valued when practitioners themselves are present in nondual space.
- Treatment plans and strategies are in the service of the present moment.
- We thrive on paradox and seeming contradictions. For example, in order to change we need to first accept what is--where and how we are now.
- We recognize the human continuous tendency to create confusion and conflict in our lives. Verbal communication is a needed but limited tool to resolve this pattern, particularly in interpersonal miscommunications.

- Deconstruction and the resulting loss of points of reference may be uncomfortable for many people. New concepts (constructs) are introduced only to support the person in transitioning towards healthier ones. Healthier constructs on the conditioned level facilitate the unconditioned to radiate through all aspects of our lives.
- Empowering patients in the context of their own conditioning, families, cultures and spiritual or philosophical beliefs.
- Cultivating a nonjudgmental stance and transcultural sensitivity rather than attempting to master multicultural competence. We honor the diversity of cultural, religious and non-religious practices multiplied by countless personal interpretations. We point to the nondual elements in people's own personal philosophies.
- We embrace our conditioned nature. Where unhealthy conditioned beliefs have not yet been deconstructed, we focus on what brings joy, peace of mind, and fulfillment while continuing to address the conditioned obstacles to well-being.

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