MINDFUL AWARENESS IN EFFECTIVE MEDIATION

High levels of emotional arousal are incompatible with quiet deliberation and calm ways of thinking, which are prerequisites for effective mediation. In order to lower high arousal levels, a deeper understanding of neuropsychological brain processes relevant to emotion is of primary importance. This article focuses on practices designed to enhance the mediator's emotion management. First, theoretical concepts such as mindfulness and mindful sensory awareness are discussed. Subsequently, some key neuropsychological foundations of these concepts are presented. Mindful slow breathing is suggested as a method to manage stress and emotions. Mindful awareness is proposed as a mindset to be adopted by mediators, and sensory awareness is presented as a training tool for mediators.

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I. Introduction

- 1 More often than not, when working with parties in distress, the mediator is confronted with a spectrum of feelings and emotions. These may range from annoyance, frustration and aggression on the one hand, to sadness, despair and depression on the other. Conflictual interactions between the parties, as well as during contact between the mediator and the parties, may generate stress which in its turn frequently fuels emotional arousal.
- The mediator not only has to manage emotional responses from the parties, but his or her own emotions too. Frequently, in the process of mediation, it is a challenge to keep one's own level of emotional arousal low. High emotional arousal is incompatible with calm thinking and quiet deliberation essential ingredients of the mediator's work. The mediator needs practical skills to manage emotional interactions and, more specifically, to curb high levels of emotional arousal in the parties as well as in him or herself. In this way, conflicts might be eventually transcended, and a common ground of understanding might be established.

1 Michael Tophoff, "Quieting the Mind: Aspects of Neuroscience in Reconciliation" (2019) 1(6) Journal of Mediation and Applied Conflict Analysis 788.

- 3 Emotional responses are not only generated within the practice of mediation. Outside the office, the mediator is confronted personally, socially, politically with an array of situations of conflict and discord. These situations, in their turn, frequently generate stress reactions. When these acquire a chronic nature, they may lead to stress-related disorders and burnout.
- One of the main causes of conflict, of whatever nature, is based on the concept of identity,² and thus widely varies. Identity is a construct of narratives about individuals, groups and nations, based on race, religion, gender or political orientation, in whatever combination. Identity is actively appropriated by an individual or by a group, and, likewise, in a passive sense, it is a stamp which is put on other individuals or groups by the outside world. As a person identifies with his or her identity, however, the very roots of conflict are established. The identity of "I" is, psychologically, close. The "I" however, generates dialectically a "You". While the "I" is close, the "You", the other, is distant. While the trio "I-me-mine" is familiar, the "other" is unfamiliar. The same holds true for the "Us" versus "Them". In professional practice, the mediator is, per definition, confronted with this dichotomy represented by conflicting parties. These conflicts, frequently characterised by high states of emotional arousal, have to be effectively managed by the mediator.
- In order for the mediator to be mindfully able to manage his or her emotions and with emotional situations professionally not as an afterthought some fundamental insights and skills are necessary. In the first place, the mediator has to consciously recognise and identify these situations he or she, and the parties, present. The mediator has to become mindfully aware of what is, emotionally, happening within the process of mediation. To be able to curb high levels of emotional arousal, a deeper understanding of brain processes which are relevant to emotions seems important because emotions are physical phenomena generated in the brain. In this way, the mediator gains insight into what emotions are, how they arise and how they might be managed adequately.
- In this article, practical tools are offered to facilitate effective mediation. First, theoretical concepts, such as mindfulness and mindful awareness are elucidated. Mindfulness, here, is defined in its classical Asian religious context as it provided the genesis for postcolonial and commercialised uses of the concept. Mindful awareness is defined as "meditation-in-action" or "meditation-in-the-marketplace". Second, some key neuropsychological foundations will be discussed to foster a deeper understanding of what happens internally in the mediator and the parties. Understanding of some neuropsychological facts will help to enhance

² Michael Tophoff, "Harmony and Conflict Resolution in Mediation – A Classical Daoist Contribution" 6(2) *Journal of Mediation and Applied Conflict Resolution* 1; Michael Tophoff, "A Mediator's Way to Conflict Resolution: A Buddhist Perspective" 13 *American Journal of Mediation* 55.

expertise when executing practice-oriented interventions. To facilitate the mediator's practice, the method of mindful slow breathing will be presented. Subsequently, two practices will be described to enhance the mediator's mindful awareness. This article conclude with a summary of these practical tools.

II. Mindfulness and mindful awareness

A. Mindfulness

- The concept of mindfulness is problematic. On the one hand, mindfulness might be placed and defined in its original Asian context. On the other, this concept, contemporarily, is used to cover a whole range of practices from "stress management" to "wellness" which frequently is not corroborated by neuroscience-based research or valid effect research evidence.
- The term "mindfulness" is originally based on the *Pali* concept of *sati*.³ It is often translated as remembrance or recollection of the Buddha or of his teachings.⁴ Grossman and van Dam⁵ define the concept as "a practice of retentive focus, which cognitively implies discriminating ... within the dimensions of past and future". Thich Nath Hanh⁶ describes mindfulness as "remembering to come back to the present moment". In Mandarin Chinese, *sati* is indicated by the Character *nian*,⁷ consisting of two parts: the upper part representing *now* and the lower part representing *mind*. It refers to consciously noticing what happens as it is occurring.
- 9 Historically, one of the oldest texts on mindfulness, from the Buddhist Theravada tradition,⁸ focuses on "The Four Foundations of Mindfulness". This is found in the *Satipatthāna Sutta* of the *Majjhima*

In Sanscrit, this is also spelt as *smrti*.

⁴ Paul Grossman & Nicholas T Van Dam, "Mindfulness by any other Name ...: Trials and Tribulations of *Sati* in Western Psychology and Science" in *Mindfulness: Diverse Perspectives on its Meaning, Origins and Applications* (J Mark G Williams & Jon Kabat-Zinn eds) (Routledge, 2013).

⁵ Paul Grossman & Nicholas T Van Dam, "Mindfulness by any other Name ...: Trials and Tribulations of *Sati* in Western Psychology and Science" in *Mindfulness: Diverse Perspectives on its Meaning, Origins and Applications* (J Mark G Williams & Jon Kabat-Zinn eds) (Routledge, 2013) at p 221.

⁶ Thich Nhat Hanh, Zen Battles: Modern Commentary on the Teachings of Master Linji (Broadway Books, 2013) at p 59.

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⁸ Theravada is a *Pali* term ("teaching of the elders of the order"), the only surviving branch of the *Hinayana* School, developed from the third century BCE. It conceives itself as being the representative of the true teachings of the Buddha and emphasises meditation, observance of Buddhist ethical rules – all this requiring the state of a monastic.

 $Nik\bar{a}va^9$ as well as in the $D\bar{i}gha$ $Nik\bar{a}va$ (DN 22 of the $P\bar{a}li$ Canon¹⁰). This meditation practice defines mindfulness in the sense of awareness of body, of feelings, of mind and of the objects of mind. Central to this is the awareness of the process of breathing in and out, where breathing becomes both deeper and slower as the practitioner becomes conscious in awareness. This causes, as will be described in the next paragraph, an arousal of the parasympathetic nervous system, 11 allowing for more calmness and quiet, thus facilitating calm deliberation.

- Even more ancient is the Chinese religious tradition of classical Daoism. In Daoism, quietist or apophatic meditation is described, such as "embracing the One", 12 "guarding the One" 13 and "sitting in forgetfulness". 14 Apophatic meditation according to Komjathy,15 "emphasises stilling and emptying the heart-mind until one enters a state of stillness and emptiness". Apophatic meditation is practiced by sitting in silence with the awareness of the process of breathing. This has been practiced in China from Classical Daoism during the Warring States period and early Han dynasty onwards, through the various movements of monastic Daoism, continuing to contemporary times, especially in its Longmen¹⁶ ("Dragon Gate") lineage in the Chinese People's Republic.
- The Daode Jing, the focal Daoist text, which originating in or around 500 to 200 BCE, describes this form of meditation lucidly:¹⁷

Who is able, as muddy water,

by stilling to slowly become clear?

12 present, the concept of mindfulness frequently decontextualised and deracinated from its roots. In the field of contemporary psychotherapy, for instance, the Buddhist concept of mindfulness is commodified as "Mindfulness-Based Stress Reduction". There, it is defined as "a meditation practice to cultivate present-centered

The Middle Length Discourses of the Buddha: A Transaation of the Majjhima Nikaya (Bhikkhu Nanamoli & Bhikkhu Bodhi trans) (Wisdom Publications, 2015) at p 145 ff.

¹⁰ The Pali Canon contains the canonical texts of the Theravada; See The Long Discourses of the Buddha: A Translation of the Digha Níkaya (Maurice Walshe trans) (Wisdom Publications, 2nd Ed, 1995) at p 335 ff.

While the sympathetic nervous system is involved in action, eg, the fight-flight-freeze actions, the parasympathetic nervous system is involved in quiet and rest.

Baoyi, spelt as 抱一 in Mandarin Chinese. Shouyi, spelt as 守一 in Mandarin Chinese.

Zuowang, spelt as 坐忘 in Mandarin Chinese.

Louis Komjathy, The Daoist Tradition: An Introduction (Bloomsbury Academic, 15

The name is derived from Longmen Dong ("Dragon Gate Grotto"). It was founded by Wang Changyue. During the Qing dynasty, Longmen became firmly established in China. The Longmen tradition survived; monks and practitioners are active in China and in Taiwan.

¹⁷ Michael LaFargue, The Tao of the Tao Te Ching: A Translation and Commentary (State University of New York Press, 1992) at p 14.

awareness in a non-judgmental way". As will be shown in the next paragraph, the human brain is simply not able to "cultivate present-centered awareness in a non-judgmental way". Gradually, "mindfulness" has been commercialised as a panacea for chronic pain, stress, burnout and recurrent depression for terminal patients, victims of sexual violence, Jewish people, Rabbis, delinquents, organisations and for businesses. Presearch evidence for these findings is often problematic from a psychometrical and methodological perspective.

B. Mindful awareness

Mindful awareness is characterised both by sensation and by cognition. It implies, first, on a sensate basis, the mediator's "feel" of a given situation, which includes the awareness of his or her internal sensations as well as an accurate perception of external sensations. The mediator, likewise, has to be cognitively aware of the interpersonal interactions and the motivational needs which are presented. The mediator, in other words, has to be mindfully aware of what is actually present within the dynamics of him or herself and the parties – only then can the mediator act. Mindful awareness is an attitude and a mindset. It is critical to mediation practice.

Historically, the origins of mindful awareness, again, have to be found in an Asian religious tradition, in Zen Buddhism, the Japanese version of Chinese *Ch'an*. One of the main schools of Zen, is the *Rinzai* school, considered to be founded by Myoan Eisai. Here, the religious, monastic practices (like meditation) were radically transported away from the monastery and into the secular world. Meditation, as a special activity, came to be held in lower esteem, in favour of what is called "meditation-in-action" or "meditation-in-the-marketplace". Meditation was no longer confined to a monastic activity. It became an attitude, a mindset from which every kind of daily activity could be approached. In a non-binary way, Buddhist ideals could melt with day-to-day business affairs, in the words of *Rinzai* Master Hakuin: "It is possible to be fully involved in the business of Imperial Government and at the same time trodding the bottom of the sea of Buddhism."

¹⁸ Jon Kabat-Zinn, "Mindfulness-based Interventions in Context: Past, Present and Future" (2003) 10(2) Clinical Psychology 144; David S Ludwig & Jon Kabat-Zinn, "Mindfulness in Medicine" (2008) 300(11) JAMA 1350.

¹⁹ William Richard Davies, "Mindful Meditation for Healing Burn-out" (2008) 22 Holistic Nursing Practice 32; Andrew Olendzki, "Meditation, Healing and Stress-reduction" in Engaged Buddhism in the West (Christopher S Queen ed) (Wisdom Publications, 2000).

²⁰ Michael Tophoff, Chan Buddhism: Implications of Awareness and Mindfulness – Training for Managerial Functioning (Cartim, 2003).

²¹ Philip B Yampolsky, *The Zen Master Hakuin* (Columbia University Press, 1971) at p 56.

For a deeper understanding of the functioning of mindfulness in effective mediation, insight into some foundational neuropsychological facts about emotions and conflicts might be helpful. These lead to more expertise when executing practice-oriented interventions. In order to grasp some essentials of these foundations, this article will briefly discuss the brain's limbic system, as well as its prefrontal cortex.

III. Some neuropsychological foundations

A. The limbic system

- The limbic system, seen as a functional unit, is located between the neocortex and the lower brainstem. In mammals, it is functional in behaviours such as emotion, social interaction and memories. Neuropsychologically, it includes the circuitry of the amygdala, hippocampus and the diencephalon (thalamus und hypothalamus). The limbic system connects to consciousness in the prefrontal cortex, as well as to subcortical centres in the brainstem. Since it controls emotions, behaviour and memories, being responsive to all of our incoming stimuli of whatever nature, understanding its neuropsychological functioning is essential for a deeper insight into the fundamentals of the meditative experience, which is based on the healthy functioning of the limbic system and its connections to the prefrontal cortex. Some understanding of these processes may help a mediator to better recognise what is happening within the mediation process.
- One of the most prominent organs in the limbic system is the amygdala. The amygdala consists of two almond-shaped clusters located deep within the temporal lobes. It receives input from all sensory systems, eg, visual, olfactory and auditory, and is connected to the hypothalamus and the prefrontal cortex. In scanning the incoming stimuli, the amygdala creates a complex image of the sensory world. Emotionally, the amygdala "colours" perceptual and memory inputs linked to survival. Because of its excitability, "the amygdala can be informed about something scary before the cortex has a clue". In turn, the amygdala connects to subcortical motor pathways, making fight-fear-freeze responses possible in all mammals.
- The response to these feelings of fear and anxiety proceeds via two pathways: neural and hormonal.²⁵ On the *neural* pathway, an incoming fearful signal activates the hypothalamus, which relays these signals in

²² Bryan Kolb & Ian Q Whishaw, Fundamentals of Human Neuropsychology (McMillan, 7th Ed, 2013).

²³ Michael A West, The Psychology of Meditation (Oxford University Press, 2016).

²⁴ Robert M Sapolsky, "Double-edged Swords in the Biology of Conflict" (2018) 9(2625) Frontiers in Psychology 1 at 40.

²⁵ Robert M Sapolsky, "Double-edged Swords in the Biology of Conflict" (2018) 9(2625) Frontiers in Psychology 1.

fractions of seconds to the spinal cord (not to the prefrontal cortex), activating the sympathetic nervous system to respond either with a flight, fight or freeze response. The hormonal route, ultimately, has the same effect as the neural one, strengthening indeed the fight-fear-freeze response. Here, the incoming threatening signal triggers activity in the hypothalamus, which in his turn activates the pituitary gland (the hypophysis), stimulating the adrenal cortex to produce cortisol, the "stress hormone", leading to the fight-fear-freeze response. One of the effects of cortisol is the prevention of blood flow to the prefrontal cortex.²⁶ In this way, rational thinking is automatically disabled²⁷ and, for the mediator, it is difficult to distance oneself from these responses and to reach calmness. It is important to underline again, that it is not easy, for the mediator, to not give in to these pre-programmed responses. Understanding the workings of the brain, however, does help one to become aware of what is happening emotionally. Being aware of these processes facilitates connection with the prefrontal cortex to distance oneself from emotions, and to reach calmness and rational thinking.

- The amygdala has a primary role in processing attention and emotions as it is an evaluating system, deciding instantly whether a stimulus is noxious or not. If it is considered noxious by the system, the genetically programmed, evolutionarily fundamental fear-flight-freeze mechanisms towards immediate action are triggered. The amygdala's right side in particular seems to be associated with fear and anger as well as with memories which are emotionally "coloured", *eg*, psychotraumatic ones. As such, the amygdala plays a focal role in the neuropsychological narrative of meditation, since feelings and emotions in all their complexities and subtleties are to be consciously recognised by the mediator in their sometimes unforeseen appearances before a process of "letting go" can begin.
- Markowitsch and Staniliu²⁹ point to the amygdala's function for the processing of autobiographical events: "Given its contribution to the integration of emotion, perception and cognition (including memory for past autobiographical events) the amygdala also forges the establishment and maintenance of an integrated self". Doll *et al* ³⁰ studied the effects of Attention to Breath ("ATB") as a basic mindfulness practice, showing that ATB down-regulates amygdala activation while it increases the connection between the amygdala and the prefrontal cortex.

²⁶ Michael Tophoff, Chan Buddhism: Implications of Awareness and Mindfulness – Training for Managerial Functioning (Cartim, 2003) at p 274.

²⁷ Amy Arnsten, "Stress Signaling Pathways that Impair Prefrontal Cortex Structure and Function" (2009) 10(6) *Nature Reviews Neuroscience* 410.

²⁸ Michael Tophoff, "Quieting the Mind: Aspects of Neuroscience in Reconciliation" (2019) 1(6) *Journal of Mediation and Applied Conflict Analysis* 788 at 795.

²⁹ Hans Markowitsch & Angelica Staniloiu, "Amygdala in Action: Relaying Biological and Social Significance to Autobiographical Memory" (2011) 49(4) Neuropsychologia 718 at 718.

³⁰ Anselm Doll *et al*, "Mindful Attention to Breath Regulates Emotions via Increased Amygdala-prefrontal Cortex Connectivity" (2016) 134 *Neuroimage* 305.

Since the limbic system "colours" *all* of our incoming sensate stimuli *before* they reach the level of clear consciousness, it is evident that a "non-judgmental" attitude is not possible. In this way, we are all prejudiced. Likewise, it is neuropsychologically not possible to remain for a longer period in "the here-and-now". The limbic system does not incorporate the present, but it always "colours" every impression with memories of the past and expectations about the future.

B. The prefrontal cortex

- The prefrontal cortex, the most sophisticated part of the central nervous system, in the words of Austin, "distances us from our environment". The prefrontal cortex is part of the neocortex, together with the parietal, occipital and parts of the temporal cortices, only fully maturing at around 24 years of age. It is functional in avoiding and in getting overwhelmed or overruled by the signals from the limbic system, from which it continuously receives massive amounts of information. Sapolsky formulates succinctly: The frontal cortex makes you do the harder thing when it's the right thing to do. Sensory input is coded into processes of cognition and decision making while the processing and scanning of sensory messages takes place subcortically. In the prefrontal cortex, our behaviours are monitored and fine-tuned. Sensory information is cognitively transformed into meaningful wholes, which may then be integrated into sequences of meaning. Here, our instinctual impulses seem to be socialised and evaluated as cognitions.
- The fundamental role of the prefrontal cortex in mediation cannot be overrated. Even when the limbic system might be relatively at rest, it only needs minimal stimuli to become active again. Through cognition, as a function of the prefrontal cortex, the mediator is able to recognise and acknowledge the incoming message and eventually let go of it, thus strengthening cortical activity and lowering limbic arousal levels. Emotional responses, rising from the limbic system might be controlled and calmed down, as will be discussed in this article. The orbital prefrontal cortex, which is intricately connected with the limbic system, controls impulses and drives, specifically those deemed unsociable and thus undesirable. It seems also to weigh up the consequences of actions before one actually engages in them or not, depending on the "intensity" of the impulse load. The medial prefrontal cortex seems mainly to process action-oriented behaviours. The emphasis within these actions is intentional as well as attentional. In this way, these behaviours point to future-oriented actions.

³¹ James H Austin, Zen and the Brain (MIT Press, 1998) at p 256.

³² Robert M Sapolsky, *Behave: The Biology of Humans at our Best and Worst* (Penguin, 2017) at p 45.

IV. The practice of mindful awareness

The practice of mediation requires the cooling of emotional arousal, an atmosphere of quiet thinking and deliberation, a clear focus and a high level of receptivity to external as well as internal signals. Tools to implement these requirements should be based on research evidence. First, mindful slow breathing will be suggested as a method to control emotional arousal. Second, mindful awareness will be described as "mediation-in-action" and is useful for a mediator. Finally, mindful sensory awareness will be shown to be a useful training tool for the mediator.

A. Mindful slow breathing

- Mindful slow breathing is one of the most powerful natural tools for lowering high levels of emotional arousal. The practice is easy. By focusing attention on his or her breathing, the mediator will become aware that, as a consequence, his or her rate of breath will slow down and breathing will become deeper. After only two or three minutes of slow breathing, the parasympathetic system allows for more calmness and quiet. Prefrontal activity is enhanced and calm deliberation is facilitated. Also, the mediator may invite the parties to join for one or two minutes in focusing their attention on their breathing. Also, the parties may notice how they become quieter. An atmosphere of calm deliberation can build up, providing a sound foundation for reaching a fruitful and effective solution of the dispute(s).
- 26 What exactly happens when we breathe in and out? The process of the rhythmic inbreath and outbreath are clearly described by Austin.³³ When we breathe in, from the brainstem, and more specifically from the medulla, impulses flow down the spinal cord whenever the bloodstream shows low oxygen and high carbon dioxide levels. Peripheral nerves contract the ribcage and diaphragm, so that the chest expands and the diaphragm descends: this is the inbreath. As the inbreath is completed, stretch receptors cause the lungs to become increasingly taut. Signals are sent to the brainstem where inhalation is turned off. Much of the exhalation proceeds passively, driven by the elastic recoil from the chest and abdomen. Respiration is autonomically regulated and does not require conscious attention: "it" makes us breathe in, independent of our choosing. It is not possible to not breathe. Humans can, however, focus attention consciously on their breath, as is done in mindful slow breathing.
- 27 Contemporary forms of stress prevention³⁴ emphasise slow breathing as a means to reaching a state of inner quiet and clear thinking,

³³ James H Austin, Zen and the Brain (MIT Press, 1998) at p 93.

³⁴ Michael Tophoff, "Quieting the Mind: Aspects of Neuroscience in Reconciliation" (2019) 1(6) Journal of Mediation and Applied Conflict Analysis 788

by fostering the strengthening of prefrontal cognitive activity and the slowing down of the firing of the amygdala. Doll et al35 show that mindful attention to breathing quietens emotions. Mindful or slow breathing reduces bilateral amygdala activation, while increasing prefrontal cortex activity. Meditation practice attenuates fluctuating arousal levels.³⁶ Subjects with reduced breathing rates show a substantial decrease in their ventilatory responses to carbon dioxide; focusing on breathing rhythm, firing mechanisms of their amygdala are calmed down.³⁷ Neuropsychologically, conscious breathing modulates emotion, arousal state and stress.³⁸ Homma and Masaoka point to findings that show more rapid breathing during a state of arousal.³⁹ In this context, Austin states:⁴⁰ "In breathing in, many amygdala cells discharge. While exhaling, only half of that number fires." In other words, the amygdala quiets down during expiration. Breathing is also directly linked to cognitive processes;⁴¹ there are dialectics between respiration and behaviour, in the sense that conscious breathing influences behaviour, and that behaviour, eg, sudden fear, influences breathing.

By being more aware of his or her breathing, the meditator would feel his or her respiration getting deeper and slower, as supported in Doll *et al*'s study on ATB.⁴² Meditators showed not only significantly reduced amygdala activation during ATB, but an increase in left prefrontal cortex activation.⁴³

B. "Meditation-in-the-marketplace"

Whereas mindful slow breathing is a short intervention to curb high states of arousal, "meditation-in-the-marketplace" is a personal practice which continues throughout the mediator's day-to-day activities. Meditation as such may imply a daily 20 minute period of quiet sitting with an open, receptive mind and a focus on breathing. There is an impressive body of research on the beneficial effects of meditation. A daily routine of a brief period of meditation repeated over a time frame of some

³⁵ Anselm Doll *et al*, "Mindful Attention to Breath Regulates Emotions via Increased Amygdala-prefrontal Cortex Connectivity" (2016) 134 *Neuroimage* 305.

³⁶ Michael Melnychuk *et al*, "Coupling of Respiration and attention via the *Locus Coeruleus*: Effects of Meditation and *Pranayama*" (2018) 55(3) *Psychophysiology* 1.

³⁷ James H Austin, Zen and the Brain (MIT Press, 1998).

³⁸ Shahriar Sheikbaharsi & Jeffrey C Smith, "Breathing to Inspire and to Arouse" (2017) 355(6332) *Science* 1370.

³⁹ Ikuo Homma & Yuri Masaoka, "Breathing Rhythms and Emotions" (2008) 93(9) Experimental Physiology 1101.

⁴⁰ James H Austin, Zen and the Brain (MIT Press, 1998) at p 178.

⁴¹ Detlef H Heck *et al*, "Breathing as a Fundamental Rhythm of Brain Function" (2017) 10 Frontiers in Neural Circuits 1.

⁴² Anselm Doll *et al*, "Mindful Attention to Breath Regulates Emotions via Increased Amygdala-prefrontal Cortex Connectivity" (2016) 134 *Neuroimage* 305.

⁴³ Austin describes the process of quieting the mind in experienced Zen monks during formal *zazen* as they spend about three quarters of their respiratory cycle breathing out: see James H Austin, *Zen and the Brain* (MIT Press, 1998) at p 95.

days or weeks has measurable, beneficial effects in a neuropsychological and personal sense.⁴⁴

- As meditation might also⁴⁵ be conceived as a way to train mindfulness, it facilitates an attitude of mindful awareness which may extend to the mediator's daily activities. Meditation, in this way, develops into an attitude, a mindset, as "meditation-in-the-marketplace". Hakuin, a famous Chan Buddhist teacher, said thus: "For penetrating the depths of one's own true self-nature and for attaining a vitality valid on all occasions, nothing can surpass meditation in the midst of activity." ⁴⁶
- "Meditation-in-the-marketplace" fosters a quiet attitude of wakefulness and receptivity. In this way, levels of work-related stress may be avoided or lowered. This attitude allows one to focus without tension on the process of what is happening in the mediation session and to become more sensitive to the signals that the parties are sending.
- During mediation, a high level of sensitivity to signals, whether these are internal, external, verbal or non-verbal, is needed. This sensitivity, a *conditio sine qua non* for the mediator, can be developed and trained. Within this perspective, this article will briefly expand on mindful sensory awareness.

C. Mindful sensory awareness

According to Charlotte Selver, one of the founders of sensory awareness, "the way we are conditioned to approach tasks tends to inhibit our vital powers, while, in contrast, an attitude of awareness and readiness of the total self, aligned with our activity and obedient to its dynamics, releases those powers".⁴⁷ Sensory awareness is a method where the mediator trains receptivity, concentration, awareness and focus so as to enable more effective responses to the demands of various situations.

⁴⁴ See Troels Wesenberg Kjaer et al, "Increased Dopamine Tone During Meditation-induced Change of Consciousness" (2002) 13 Cognition Brain Research 255; Sara W Lazar et al, "Meditation Experience is Associated with Increased Cortical Thickness" (2005) 16(17) Neuroreport 1893; Dirk Cysarz & Arndt Büssing, "Cardiorespiratory Synchronization during Zen Meditation" (2005) 95(1) European Journal of Applied Psychology 88; Antoine Lutz, John D Dunne & Richard J Davidson, "Meditation and the Neuroscience of Consciousness" in The Cambridge Handbook of Consciousness (Cambridge University Press, 1st Ed, 2007); Tobias Esch, "The Neurobiology of Meditation and Mindfulness" in Meditation – Neuroscientific Approaches and Philosophical Implications (Springer International Publishing, 2014); and Willoughby B Britton et al, "Awakening is not a Metaphor: The Effects of Buddhist Meditation Practices on Basic Wakefulness" (2013) 1307(1) Ann NY Acad Sci 64.

⁴⁵ Meditation, in a religious, Buddhist sense, being part of the Noble Eightfold Path, is to be placed in the context of liberation from suffering.

⁴⁶ Michael Tophoff, Chan Buddhism: Implications of Awareness and Mindfulness – Training for Managerial Functioning (Cartim, 2003) at p 105.

⁴⁷ Charlotte Selver, "Report on Work in Sensory Awareness and Total Functioning" in Exploration in Human Potentialities (HA Otto ed) (Charles C Thomas, 1966) at p 489.

Here, the mediator does not solely react from a preconditioned, cognitive behavioural pattern, but also from inner "resources".

- For a mediation to be successful, the mediator has to be able to 34 build a connection with the parties and trust plays a focal role. Apart from trust, empathy - the quality to be able to stand in the shoes of the other person as if one were that person - is needed. In mediative interaction, interpersonal trust and empathy correlate highly with success. Empathy and trust have to be operationalised into action by the mediator - only then will the parties be able to consciously sense these ingredients. Before responding to the needs of the parties, however, the mediator has to be aware of them. Sensory awareness is a tool to train the mediator's awareness of what is needed in a given situation in a compassionate, trusting and empathetic way. Sensory awareness is about noticing what is really happening in our ordinary day-to-day activities, such as standing, sitting, walking or lying down. It is about learning to be mindful of the ways we perform our activities, so that we can respond in a more direct and adequate manner, so that we can redirect our course of action, if needed and thus prevent stress-related conditions.⁴⁸
- For the mediator, as an example,⁴⁹ one way to train mindful sensory awareness when sitting is to focus on the way he or she is sitting. Is he or she sitting *in* the chair or *on* the chair? Sitting in the chair may be experienced as *sinking* into it in a "relaxed" way which hinders breathing by constricting the chest musculature, restricting the flexibility of the extremities, so that it impedes the person in actively connecting with the surroundings.⁵⁰ In mindful sensory awareness, the mediator may explore what is needed when sitting, how the support of the chair may be received and what is being sat on.⁵¹ Focusing on sensation and perception sharpens the senses of the mediator, enhances his or her vitality and makes him or her more responsive to the demands of the situation.

V. Summary

High emotional arousal is incompatible with calm thinking and quiet deliberation – both of which are essential ingredients in effective mediation. To curb high levels of arousal, a deeper understanding of brain processes relevant to emotion is important. In this article, practices were

⁴⁸ Michael Tophoff, Chan Buddhism: Implications of Awareness and Mindfulness – Training for Managerial Functioning (Cartim, 2003).

⁴⁹ Sensory awareness, as a training method in mindfulness, is frequently presented in the form of a seminar, focusing on our day to day activities including sitting, standing, walking and laying down. For an extensive description of the methods and of research evidence, see: Michael Tophoff, *Chan Buddhism: Implications of Awareness and Mindfulness - Training for Managerial Functioning* (Cartim, 2003).

⁵⁰ Charles Brooks, Sensory Awareness: The Rediscovery of Experience (The Viking Press, 1974).

⁵¹ Michael Tophoff, Chan Buddhism: Implications of Awareness and Mindfulness – Training for Managerial Functioning (Cartim, 2003).

presented to enhance the mediator's expertise in emotion management. Within this perspective, theoretical concepts such as mindfulness and mindful sensory awareness were discussed. Subsequently, some key neuropsychological foundations of these concepts were presented. Mindful slow breathing was discussed as a method to manage stress and emotions, mindful awareness was proposed as a mindset for the mediator to adopt, and sensory awareness was presented as a training tool for the mediator.