

Autogenic Training, Insight Meditation and Mindful Awareness

This webpage overlaps and complements:

- D4: "Duhkha, Impermanence, and Inter-relatedness"
- D6: "A brief introduction to two basic forms of Meditation"

1. Preamble

Autogenic Training involves specifically focusing on various parts of the body (and potential sensations within those parts of the body – e.g. heaviness, warmth); and on certain physiological functions (e.g. heart beat). In order to do this, we focus mindfully on the part of the body or physiological process in question. As Schultz recognised, this can bring about a profound psycho-physiological shift; that is, a change in our whole physiological-mind-body-state.

Autogenic Training (AT) is sometimes described as a simple relaxation technique. This is somewhat misleading in that, as with Progressive Muscular Relaxation (PMT), AT changes our mind-body state at a deep level (see Drašler Matej 2011 for a good comparison of AT and PMT). Some aspects of Autogenic Training overlap with Mindfulness, Calm Abiding Meditation, and Insight Meditation.

Deep forms of meditation are associated with specific effects on the pre-frontal cortex functions that greatly facilitate mindfulness. It is suggested that the process of "Self Actualisation" (Maslow), "Individuation" (Jung) and becoming our "Authentic Self" (Schultz) are all associated with these crucial pre-frontal cortex functions (Siegel 2007 pp 337-362; also web-page C2 in this series). All of these processes involve inner transformation.

In this paper we will be looking particularly at the overlaps between Autogenic Training, Insight Meditation, and pre-frontal cortex functions.

2. Background reflections on Active and Passive Concentration

The distinction between Active Concentration and Passive Concentration in Autogenic Training is of great importance, even if these actual terms are misleading¹. Schultz and Luthe give an illuminating foundation statement about this matter.

The mental activity applied during autogenic exercises is conceived of as "passive" concentration and may best be explained in contrast to what is usually called concentration, or more precisely, "active" concentration. Concentration in the usual sense is a highly complex mental function and has been defined as "the fixing of attention or a high degree of intensity of attention (J.Drever, 1955**)" or as "the centering of attention on certain parts of experience" (H.C. Warren 1934**). Concentration, in the usual sense, on some problem or activity may be conceived as a process of mental focusing, with active, goal directed investment of mental energy and will power, which implies an active effort of the person toward the intended functional result (e.g. copying a difficult design as correctly as possible). This usual type of concentration is thought of as "active" concentration because of the goal-directed efforts towards the final functional result to be achieved.

The decisive difference between this usual type of "active" concentration and the "passive" concentration used during autogenic training lies in the person's attitude toward the functional result to be achieved. "Passive" concentration implies a casual attitude and functional passivity toward the intended outcome of his concentrative activity, whereas "active" concentration is characterised by the person's concern, interest, attention and goal directed active efforts during the performance of a task and in respect to the final functional result.

Schultz and Luthe 1969 p 14

This is a wonderful description of the non-striving, non-goal directed awareness that facilitates the Autogenic process. Note that the slightly odd phrase "a casual attitude and functional passivity" refers to the intended outcome of the practitioner's activity. In other words, it is a non-striving, non judging activity. It does not mean that our attitude to Autogenic Training itself is casual; rather, I would suggest, it has the potential to allow us to become more mindful.

¹ The phrase Passive Concentration can be misleading: we are actually talking about a mental process that is focused. For this reason I prefer the term "Passive focused Concentration" or "Mindful Awareness". See also Ross 2010 p 269 under 'Active Concentration'. Some Autogenic Therapists use the term "Passive Awareness".

** I am unable at present to trace these references further.

3. Types of concentration in Meditative disciplines (see also D4 and D5)

There are many different forms of meditation, though this is not always appreciated, as Goleman makes clear when commenting on a discussion he had regarding the matter:

.....To overhear that conversation would have been eye-opening for anyone who thinks of meditation as a single, vaguely defined Zen-like mental exercise. Such an assumption is akin to thinking of all cooking as the same, ignoring the vast variation of cuisine, recipes, and ingredients throughout the world of food. Likewise, there are dozens of distinct, highly detailed varieties of mental training – too loosely lumped together in English under the term “meditation” – each with its own instructions and specific effects on experience.....”

Goleman; 2003; p 5

While accepting that the term meditation embraces many different forms, a useful distinction can be made, in general terms, between:

1. Fixed focus mediation “Calm Abiding Meditation” (Samatha) and
2. “Mindful Awareness Meditation”, which is in essence Insight Meditation (Vipasyana in Sanskrit). (See also McLennan 2006, for an excellent overview of Meditation and AT.)

Both of these forms of meditation, in their own ways, have been shown to be of great value. (See also D6 for further details of Sanskrit / Pali terms for meditation.)

Calm Abiding Meditation (Tulku 1998)

Calm Abiding Meditation brings about the Relaxation Response (Benson 1975). One basic and well known form of Calm Abiding Meditation (CAM) is simply following the breath with our attention. In some respects CAM overlaps with some, but not all, aspects of Autogenic Training. In the Standard Exercises of AT we have, if you like, a series of “fixed points” to focus on (e.g. heaviness, warmth etc²). At this level, relaxation is a salient feature³.

Thich Nhat Hanh emphasises four aspects of CAM: Stopping, Calming, Resting, Healing (Hanh 1998 pp 24-27; and see D5). Autogenic Training certainly embraces the concepts of stopping, calming, and resting; and from these three, healing can come about. If we are always rushing about, it is doubtful if true healing can occur.

Insight Meditation

It is probably true to say that all forms of Insight Meditation are grounded in Calm Abiding Meditation; hence the importance in developing a good grounding practice. Basic AT is one such grounding practice. Vipasyana thus embraces Calm Abiding Meditation, but in addition adds insight, understanding, and transformation (D5). A key aspect of Vipasyana⁴ is being truly present in this moment.

Siegel talks about Vipasyana in terms of us developing Mindful Awareness:

There are many ways of cultivating mindful awareness, each of which develops an awareness of the faculties of the mind, such as how we think, feel, and attend to stimuli. Mindfulness meditation, as one example, is thought to be especially important for training attention and letting go of a strict identification with the activities of the mind as being the full identity of the individual. One form of cultivation of the mind’s awareness of itself is derived from the traditional Buddhist approach of Vipassana, or insight meditation (Kornfield, 1993)...

Siegel 2007 p 11

Autogenic Training also helps us to “let go of strict identification with activities of the mind” in the sense that if we become aware, say, of a negative thought intrusion, we initially acknowledge it (i.e. we have the

² Actually, the analogy with a fixed point meditation would more accurately be just focusing on the right arm and seeing what happens. Even if we are not imagining any particular outcome, “Right Arm Heavy” or “Right Arm Warm” has the seeds of an idea or experience in it.

³ Such single point meditation is associated with involvement of the posterior columns and the pre-frontal region (Siegel 2007 p 108).

⁴ The term Vipasyana (Sanskrit; or Vipassana – Pali) is spelt in various ways – see also Keown 2003 and D5 in this series.

mindful awareness that our mind has wandered) and we then return to the Standard Exercise without judgement: this is more than relaxation: it is form of meta-cognition (see also Ross 2010 p 131-136).

Such mindful awareness has specific effects on certain brain circuits that do not appear to be the case with 'simple' CAM. For example, in addition to the involvement of the "posterior perceptual columns and the side pre-frontal region" the middle prefrontal cortex is activated⁵. Now these distinctions are important, because positive transformational effects come about through (clinical) interventions that engage "mindful awareness practices" – and not just simple awareness (Siegel 2007 pp 9; 108). The specific middle prefrontal cortex areas involved include, it is thought, the "orbito-frontal, anterior cingulate, and ventral and medial prefrontal cortex" (again Siegel 2007 p 109).

Siegel specifically links Mindful Awareness / Meditation to Insight Meditation. Mindful Awareness is essentially to do with Being Present in the present moment: not to do with relaxation per se.

The metacognitive dimension of mindful awareness involves more complex secondary associated cortices, such as those in the middle prefrontal region, that carry out our witness awareness function and permit us to be aware of being aware. It should be said as well that mindfulness is much more than a relaxation technique: we can become stable and clear, and we can be engaged and ready for action. It is the sense of presence, not relaxation, that embodies the essence of mindful awareness.

Siegel 2007 pp 108-109

Autogenic Training can help us on the path towards such "sense of presence" and mindful awareness.

If we focus on "Left (right) Arm Heavy", that per se is essentially simple focusing and simple awareness, and so is more akin to the CAM dynamic. As we become aware that our mind has wandered, then that is a form of being aware of being aware. In "It Breathes Me", we attend with "passive focused concentration" on the breath; at a deeper level, we may become aware that we are aware that "it is breathing me": this then is moving into the area of Mindful Awareness. Figure 1 summarises some the dynamics discussed above.

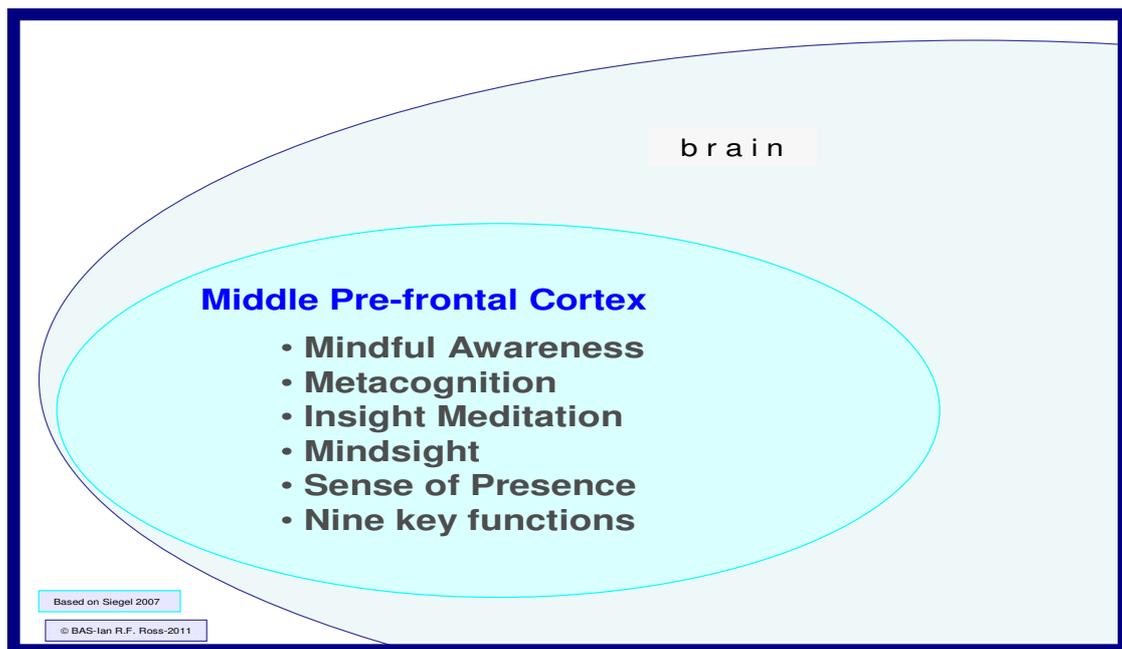


Figure 1
Mindful Awareness / Insight Meditation activate
the Middle Prefrontal Cortex

Note that the figure schematically represents the Middle Prefrontal Cortex in the anterior (frontal) area of the brain. Mindful Awareness has been shown to activate this area to a greater degree than one-point meditation (Cahn & Polich 2006). These areas include the following regions:

- Orbito-frontal
- Anterior cingulate
- Ventral and Medial prefrontal cortex

Mindsight is a term coined by Daniel Siegel and overlaps with Mindfulness (Siegel 2010; e.g. pp xi-xviii; and see C2 on this web series).

⁵ The Mindful Awareness of Insight Meditation also embraces meta-cognition (Siegel 2007 p 108).

The real significance in the difference between Calm Abiding Meditation and Insight Meditation is that the latter is associated with crucial middle prefrontal cortex functions from the perspective of Well-Being – of ourselves and others (Siegel 2007). It thus goes far beyond the Relaxation Response. These specific functions are summarised in Figure 2.

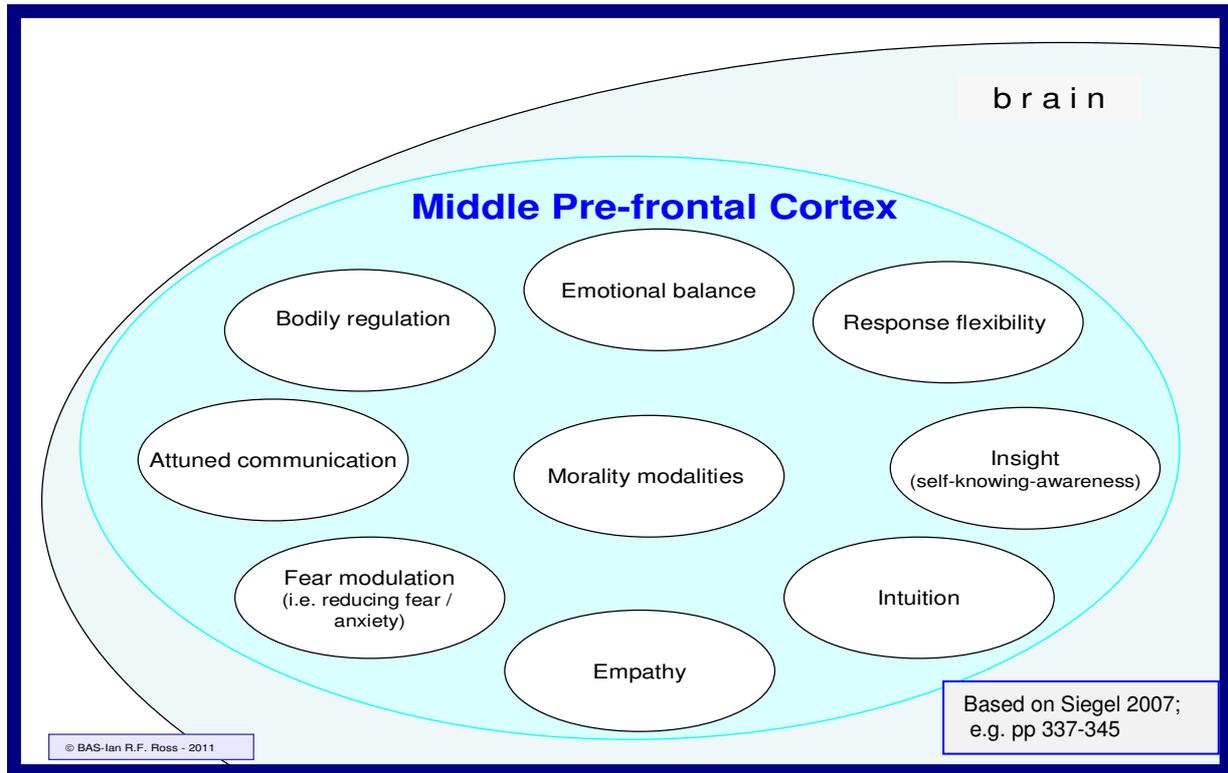


Figure 2
Nine functions of the Middle Pre-frontal cortex
 See also C2 in this series for further details

Note:

- Bodily regulation: this is at an unconscious level. For example, in Mindful Meditation / AT, the heart rate may slow down. In addition, as we become more mindful, “triggers” that would have previously upset us (physiologically) may now have no effect (see also B4).
- Response flexibility means that we do not, say, go onto ‘automatic pilot’ when something irritates us: we may, rather, mindfully breathe or gently do a Partial Exercise (e.g. NSH).
- Fear Modulation: activation of the prefrontal cortex inhibits the amygdala fear response. Meditation and Autogenic Training will thus tend to reduce fears and anxieties by inhibiting these modalities within the amygdala. This includes unconscious fears we may have from past traumas⁶.
- These pre-frontal circuits also overlap with the “extinction circuits” involved in reducing (down-regulating) conditional responses to (unconscious) conditional stimuli – see B10.
- Attuned communication is to do with, for example, becoming onto the same wave length as the other person / being. It also embraces being attuned to ourselves. Siegel suggests that the neuro-circuits involved in the mother-infant dyad overlap with the neuro-circuits of Insight Meditation (Siegel 2007 – e.g. pp xiii-xiv; and p 27).

Note also that overlapping circuits from the *lateral* Pre-Frontal Cortex (*l*-PFC) are associated with reframing / reappraisal (Gross 2002; Delgado et al 2008), both of which can be of importance for developing our well-being. Meditation has been shown to increase the activity of the *l*-PFC (Cahn & Polich 2006). See also C2, where I suggest that we could add re-appraisal / reframing to the nine functions described by Siegel.

⁶ Such unconscious fears set off by conditional stimuli may, for example, set the heart racing through increased SNS activity; afferent fibres from the heart to the brain will then tell the brain that “all is not well in the periphery” and the brain / amygdala will then send messages to the heart to keep it on the flight / fight/ hyper-vigilance path (see B10).

- Activation of the pre-frontal cortex through meditation / Autogenic Training will down-regulate the amygdala response, and thus reduce the distressing signals that have been coming from the heart. Separate from this, the slowing of the breathing that comes about in Meditation / AT is associated with increased Heart Rate Variability, through vagal efferent fibres – which will also slow the heart and its distressed condition.

Note also that Davidson's research (Davidson et al 2003A) indicates that mindfulness meditation (which embraces insight meditation) has a specific effect on boosting our immune system.

4. Being Present

It is very easy for our minds to be "pursuing the past" or "getting lost in the future" in a negative and ruminating type of way (Hanh 1990). So we will end this paper with some present moment reflections.

There are different perceptual levels. As I look out of the window while typing this, I can see a branch of a eucalyptus tree. So I am aware of that as part of a tree – yet I may not be mindfully aware of this particular tree because my higher cognitive centres assume that I know all about trees (see B6 – Perceptions, flowers and reality).

On the other hand, I may look out of the window and become aware of the tree in a different sense: of this unique branch of this unique eucalyptus tree with the leaves gently blowing in the wind. In this moment, the tree and myself are in some way intimately related – and we are each closely related to the origins of the cosmos (D4). In this process it is possible to become aware that we are aware of the tree; we can become aware of ourselves being the witness or mindful observer of the tree. We are in the present moment – we become one with the present moment; and in that oneness we are one with the tree.

Such increased awareness is an aspect of meta-cognition, and of Mindful Awareness. In being truly present in this moment, our own *presence* for both ourselves and the other becomes realised.

Our presuppositions influence our perception and conscious realisation of reality. This means that often our conscious "real-is-ation" is a distortion of the original. Our task as human beings is to see reality as it truly is, not distorted by waves in our mind (C4). As our minds settle, they are more and more able to reflect reality as it truly is.

Reference and sources /

Reference and sources

Benson, Herbert; and Klipper, Miriam Z; 1975. The Relaxation Response;	ISBN 0-00-626148-5
Bird, Jane; and Pinch, Christine. 2002. Autogenic Therapy: self help for mind and body.	ISBN 0 7171 3422 9.
Cahn, B.R.; & Polich, J. 2006. Meditation states and traits: EEG, ERP, and neuro-imaging studies.	Psychological Bulletin, 132 (2), 180-211
Creswell, J. David; Way, Baldwin M.; Eisenberger, Naomi I.; Lieberman, Matthew D. 2007 Neural Correlates of Dispositional Mindfulness During Affect Labelling –	Psychosomatic Medicine 69:560–565
Davidson; Richard J. et al; 2003A Alterations in Brain and Immune function Produced by Mindfulness Meditation;	Psychosomatic Medicine (2003); 65: 564 - 570 (From the Laboratory for Affective Neuroscience, Dept. of Psychology, University of Wisconsin, Madison, Wisconsin: Stress Reduction Clinic
Delgado, Mauricio R.; Nearing, Katherine I.; LeDoux, Joseph E; and Phelps, Elizabeth. 2008. Neural Circuitry Underlying the Regulation of Conditioned Fear and its Relation to Extinction. Neuron 59, 829-838 (11.09.2008)	
Drever, J. 1955	source not found
Gross, J.J. 2002. Emotion regulation: Affect, cognitive, and social consequences.	Psychophysiology, 39: 281-291
Keown, Damien. 2003. Dictionary of Buddhism.	Oxford University Press ISBN 0-19-860560-9
Kornfield, J. 1993. A path with a heart.	New York. Bantam Books ISBN 0-533-37211-4
Matej, Drašler 2011. Comparison of Progressive Muscle Relaxation and Autogenic Training for Generalised Anxiety Disorder. (Level 1 essay submission to British Autogenic Society 2011)	
Ross, Ian R.F. 2010. Autogenic Dynamics – Stress, Affect Regulation and Autogenic Therapy.	ISBN 978-0-9563993-0-4
Sinclair McLennan, Sue. 2006. A Comparison of Autogenic Training with Meditation. (unpublished extended essay for Level I British Autogenic Society Diploma)	
Schultz, J.H; Luthe, Wolfgang; 1969. Autogenic Therapy: Volume I; Autogenic Methods. [BAS 2001];	ISBN 0-356-22736 -7
Siegel, Daniel J. 2007. The Mindful Brain. Reflections on Attunement in the Cultivation of Well-Being	ISBN 10: 0-393-70470-X
Siegel, Daniel. 2010. Mindsight - transform your brain with the new science of kindness. The sub-heading in American editions is: The new science of personal transformation	ISBN 978-1-85168-761-9
Tulku, Ringu: 1998. The Lazy Lama Looks at Buddhist Meditation.	ISBN 0 9534489 0 8
Warren 1934	source not found

Linked themes in this Autogenic Dynamics section

A3	Towards a concept of happiness and well-being
B4	Emotional Triggers and the Refractory Period
B6	Perceptions, flowers, and reality
B10	Snakes, Conditional Stimuli, and Equanimity
C2	Mindsight, our seventh sense – and associated middle pre-frontal cortex functions
C4	The Hub of the matter – developing our seventh sense
C7	Being in touch with our feelings – Hemispheric Integration (includes the concept of Affect Labelling)
D1	Reflections on foundations for Mindful Living (based on Kabat-Zinn)
D4	Duhkha, Impermanence, and Inter-relatedness
D5	Seven Practices of Mindfulness (after Thich Nhat Hanh)
D6	A brief introduction to two basic forms of Meditation

Thanks to Sue McLennan, Michael Ross, and Annie Sturgeon
for their helpful comments and proof reading.

October 2011