

Mindsight – our seventh sense and associated pre-frontal cortex functions

Daniel Siegel has coined the term Mindsight to describe the extraordinary potential we have as human beings to be aware of what is going on within and without us, and to be aware that we are aware (Siegel 2010). Mindsight embraces mindfulness, and compassion & concern for ourselves and others. It has sometimes been called our seventh sense. Mental Training – in the form, for example, of Meditation, Positive Mental Training, and Autogenic Training – can facilitate the development of Mindsight.

Please note: this paper is based mainly on the work of Daniel Siegel (Siegel 2010)

The Seven Senses A new perspective on our Senses

I. Our Five basic senses

These are the five basic senses that we are all familiar with: touch, taste, smell, sight and hearing. These five basic senses allow us to become aware of what is going on in the outside world.

II. Sixth Sense: Background Feelings

Antonio Damasio uses the term Feeling to denote the subjective awareness of emotions (Damasio 1994 e.g. p 143; 1999). He also uses the term background feelings to denote the minute by minute subjective feeling state that we are in at any one moment – that does not originate in a classical emotion such as fear or joy. We could say that the inner state of the body is constantly being monitored (in the brain and periphery) and this gives rise to background feelings.

He has this to say specifically about background feelings: “It is probably true to say that background feelings are a faithful index of momentary parameters of inner organism state. The core ingredients of that index are (1) the temporal and spatial shape of the operations of the smooth musculature in blood vessels and varied organs, and of the striated muscle of heart and chest; (2) the chemical profile of the milieu close to all those muscle fibres; and (3) the presence or absence of a chemical profile signifying either a threat to the integrity of living tissues or conditions of optimum homeostasis.”¹ (Damasio 1999, pp 286-287)

The experience of say heaviness and / or warmth while doing an Autogenic sequence is actually a manifestation of this sixth sense: i.e. becoming aware of such bodily sensations / processes.

III. Seventh Sense: Mindsight

Mindsight is one of the most extra-ordinary and wonderful developments in evolution. As a species, we have inherited neuro-circuits of the Reptilian Brain, the Old-Mammalian Brain (e.g. the limbic system and the amygdala); the neo-cortex (which has developed especially in primates); and the Pre-Frontal Cortex (PFC), which has developed specifically in humans. Mindsight depends upon these Pre-Frontal Cortex circuits. The figure below places Mindsight in the context of our other basic senses.

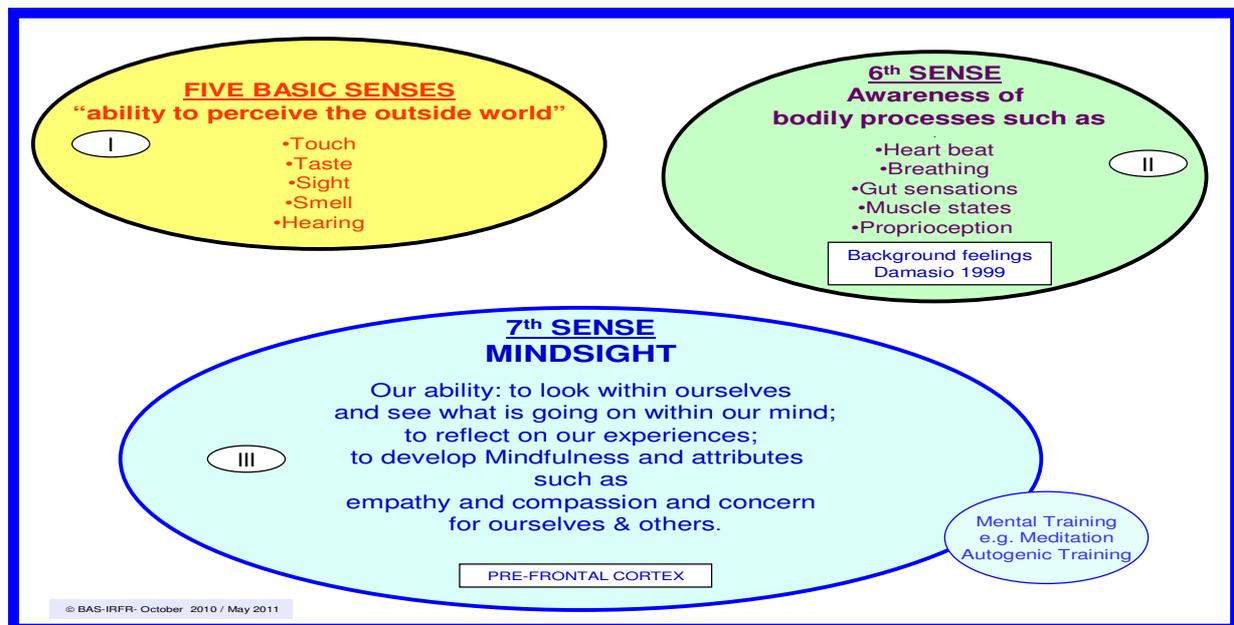


Figure 1: Mindsight and the Seven Senses
Appropriate mental training facilitates the development of mindsight

¹ Such background feelings include: “fatigue; energy; excitement; wellness; sickness; tension; relaxation; surging; dragging; stability; instability; balance; imbalance; harmony; discord.” (Damasio 1999 p 286)

Mindsight embraces our ability to be conscious and aware of what is going on within and without; and to develop the skills to control and monitor this in a Mindful way. Those who have suffered damage to the pre-frontal cortex may no longer have mindsight – or the ability to develop it. Some of key aspects of mindsight embrace the following:

1. **Bodily regulation.**
 - If we become upset or flustered, our heart rate tends to rise and our blood pressure may go up.
 - This will become less likely as we develop mindsight: in other words, mindsight has the ability to exert some control on our autonomic nervous system. In particular, it allows the Para-sympathetic nervous system to exert its calming effect on our mind and body. This will be greatly facilitated by Meditation and / or Autogenic Training – for example, the judicious use of a Partial Exercise – such as NSH.
2. **Emotional balance**
 - Our pre-frontal cortex allows us to develop the skills to monitor our own emotions, and in particular can facilitate the development of positive emotions, especially as we begin to develop our skills in bodily regulation. Such emotional balance can be enhanced by Mental Training.
3. **Fear modulation**
 - This is actually part of bodily regulation. A new experience may trigger a FEAR (Panksepp 1998 & B3) response in us because it is pattern matched (within the amygdala circuits) with a previous fear trigger. This pattern matching may be inappropriate. (Note that old disturbing memories and / or our imagination can also trigger this same FEAR-response.)
 - In any event, disciplines such as Meditation (and by extrapolation Autogenic Training) can activate the pre-frontal cortex which in turn inhibits the amygdala, and ‘switches off’ the FEAR-circuits.
4. **Attuned communication**
 - As we develop mindsight, we become attuned to what is going on in the other person as well as within ourselves: if we can thus get on the same wavelength as the other person(s), this will greatly facilitate communication.
5. **Response Flexibility**
 - If we see our boss and imagine that she or he is angry with us, this will actually be pattern matched (Griffin & Tyrell 2003) with our archetypal FEAR-system (e.g. a bear attacking us); and so our response may very well be acted out by these old archetypal neuro-circuits.
 - As we learn to step back from our immediate emotional response, we can de-personalise these primitive fears and so develop the ability to make a flexible response (also see B2).
 - The Partial Exercises, or the full AT Standard Exercise sequence, can help us in this.
6. **Empathy**
 - Empathy goes deeper than sympathy. Sympathy is to do with being aware another is suffering; empathy is the ability to feel what it is like for the other – to as it were enter their mind and so experience what they are experiencing.
 - Such empathy will embrace what Siegel describes as “you maps” (i.e. mental maps of what is going on for the other) and from this we can create “we maps”, linking “you and me”² (Siegel 2010 pp 7-9).
7. **Insight**
 - Siegel links insight with our ability to become aware of what is going on within ourselves.
 - It “allows us to make me-maps enabling us to perceive our own mind” (Siegel 2010 p 28).
8. **Intuition**
 - Carl Jung has linked intuition to our ability to sometimes know what logically we cannot.
 - Intuition allows us to get direct information from our emotions (e.g. Nurturing and CARE-circuits; SEEKING-circuits – Panksepp 1998) and from the body, including the heart. It can thus embrace what is heartfelt: thus it goes beyond mere reason and logic.
9. **Compassion for all**
 - Siegel calls this “moral awareness”. I have reframed this as compassion for all.
 - Mindfulness embraces the concept of the inter-relatedness of all; while some are suffering, in one sense we all suffer. So mindfulness leads to compassion and concern for all – and thus also for our planet.
 - Damage to the pre-frontal cortex can lead to amoral behaviour.
 - Compassion for all will embrace “we maps”; and in that sense outlaws the concept of us and them (or I+, U- in Transactional Analysis terms).

Adapted from Siegel 2007; & 2010

Figure 2

Nine Middle Pre-Frontal Cortex Functions associated with Mindsight

For the research basis of the above nine, see Siegel 2010 pp 341-345 for selected references

² In this model, we also have “me maps”, which help us to know what is going on within ourselves: the pre-frontal cortex is crucial for this – as of course are a basic five senses and our sixth sense associated with background feelings.

To the above nine functions of the PFC relating to Mindsight described by Siegel, we could add a tenth, Reframing. Note that reframing may be involved in some of the above nine.

Reframing

- As humans we have the remarkable ability to reframe experiences, and thus see them in a different light. For example, if we have had a troubled childhood, and are out of harmony with a parent, a reframe might include reflecting on what our parent may have been experiencing when she or he was say seven or eleven years old (see B2 in this series).
- The ability to reframe is a function of the pre-frontal cortex.
- Ernest Rossi has suggested that every time we recall an old memory we have the opportunity to reframe it: thus “every recall is a reframe” potentially (Rossi 2002 p xv).
- Such a reframe will be associated with the development of new synapses and the laying down of new protein in the brain.

Mindsight does not just happen: we need to work at it – just like any other skill or craft³. We can only become physically fit by taking regular physical exercise. In the same way, we can only develop a fit, healthy, mindful and compassionate mind through mental training. Disciplines such as Meditation, Autogenic Training and Positive Mental Training help us greatly in developing both the sixth and seventh senses, and the above important PFC functions. This can thus be of great importance for the individual and society.

Note: the ten attributes of Mindsight are all functions of the Pre-Frontal Cortex, the “Heart of Mindsight”.

References and sources include

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Stewart, Ian; Joines, Vann; 1987. <i>TA Today: A New Introduction to Transactional Analysis</i>; Lifespace Publishing;	ISBN 1-870244-00-1

[Linked themes in this Autogenic Dynamics section](#)

B2	Reframing, Reappraisal and Well-Being
B3	Emotional Operating Neuro Circuits – a brief introduction to Panksepp's model
B4	Emotional Triggers and the Refractory Period
C9	Making sense of our lives – Narrative Integration

³ Having said that, it is also true that if we have attuned parents we will be more likely to have a good foundation for developing Mindsight further; this is because positive attachments in early life are closely related to the wholesome development of the Pre-Frontal Cortex – and in particular the Middle Pre-Frontal Cortex.

If on the other hand we have experienced significant difficulties during our childhood and / or with our parents, this can be very difficult for us. However, research indicates that the most significant predictor of our own ability to be attuned to our own children is that we develop a coherent story / narrative of our own childhood and family background. Such a coherent narrative facilitates the development of our own Mindsight. And if we can make sense of our childhood, then we are much more likely to become attuned parents ourselves (see C9).