INVESTIGATING MENTAL PHENOMENA

The second of the seven Awakening Factors is *Dhamma Vicaya* (dah-mah vih-chah-yah. Dhamma can be translated in two ways: dhamma, spelled with a small d, represents any object within subjective experience, while Dhamma, spelled with a capital D, represents those mental phenomena that are primary Buddhist concepts conducive to liberation from dukkha. In an article posted at the Insight Meditation Center, insightmeditationcenter.org/books-articles/articles/investigation/, Gil Fronsdal has this to say about this Awakening Factor:

“The Buddhist term for investigation is dhamma vicaya. Vicaya has the connotation of making distinctions or sorting. The notion of sorting can be likened to the pre-modern way of sorting grain. After harvesting, farmers separated the chaff from the grain, the bran from the kernel, and the good grain from the rest. In a similar way, Dhamma vicaya refers to distinguishing between what is conducive to the development of our practice and what is not. We can use our intelligence to be discerning about our experience, to abandon the unwholesome and to cultivate the wholesome.”

The term I use for this factor is *investigating mental phenomena*. A key capability for cultivating the process of Awakening is a sorting of the other functions also operating in the mind. We talk about ego as if it is a noun, “my ego”, or, more objectively, “the ego”—it is not a thing, but rather is a process of discrimination, as the brain sorts through the flood of incoming stimulation. When unprocessed stimuli enter into the brain, different systems simultaneously operate to create meaning and value, based on prior experience. The process of investigation that reviews the ways a self can be created is reflected in the Satipatthana Sutta within the section dedicated to the Awakening Factors, specifically dhamma vicaya:

"Furthermore, the monk remains focused on mental qualities in & of themselves with reference to the *seven factors for Awakening.* And how does he remain focused on mental qualities in & of themselves with reference to the seven factors for Awakening? There is the case where, there being investigation of mental phenomena as a factor for Awakening present within, he discerns that 'investigation of mental phenomena as a factor for Awakening is present within me.' Or, there being no investigation of mental phenomena as a factor for Awakening present within, he discerns that 'investigation of mental phenomena as a factor for Awakening is not present within me.' He discerns how there is the arising of unarisen investigation of mental phenomena as a factor for Awakening. And he discerns how there is the culmination of the development of investigation of mental phenomena as a factor for Awakening once it has arisen.

"In this way he remains focused internally on mental qualities in & of themselves, or externally... unsustained by (not clinging to) anything in the world. This is how a monk remains focused on mental qualities in & of themselves with reference to the seven factors for Awakening.

One of the functions of dhamma vicaya is to investigate the transient nature of subjective experience, the arising and passing away of the flow of self-state organizations. The investigation also functions as a way to “see through” the fabricated nature of the meaning and values created through the actions of craving and clinging. This investigative activity deconstructs the misperception that there is an enduring/autonomous self.

For example, when you read the word “apple”, the visual stimulus starts being processed, producing an understanding, perhaps even a mental image of an apple. That seems simple and straightforward, but several different “sortings” occur rather quickly. Most people would associate the word with a pleasant feeling tone, perhaps a yearning for the taste. Most people would associate the apple with the color red, but some apples are green, so that might pop up as a mental image. I don’t particularly like the taste of a Granny Smith apple--too tart--so my feeling tone might include an exception, that is, if the memory of tartness was strong and repelling, aversion to the green image would take precedence. I might say that if the apple is green, I don’t want it. However, some green apples are delicious to my taste, such as Crispin variety of apple. Dhamma vicaya is the process that analyzes the fabrication process, supporting insights into the transient and impersonal nature of the mind’s creations.

This description is meant to convey insight about how “my” preferences are formed, and can be applied to a multitude of opinions, beliefs, emotions and behaviors. Because the ego involves a sorting process, craving and clinging turns that process into what the Buddha called “the thicket of views” and “the tyranny of I, me and mine”. Craving is *investigated* as an energetic reaction, either wanting or not wanting, either the thought of a green apple or the actual apple, if it is present. Clinging is *investigated* in regard to whatever internal commentary is associated with the impulsive reactivity of craving, creating a narrative that seemingly validates the impersonal characteristics into “apple” and “like/don’t like”.

The egoic process is further *investigated* beyond identifying an object such as an apple, developing insights into how craving and clinging also more fundamentally creates a self, a witnesser or experiencer, the actor or the acted upon. This concept is called duality, and creates a fabricated separating process—the ultimate goal of the process of Awakening is to release awareness to nonduality, the unconditioned, Nirvana.

Dhamma Vicaya investigates the process as it is operating in an ongoing way, to discover how craving and clinging operate, making a sensation into a feeling, perception and identified “self” and then coordinating with the other Awakening Factors to deconstruct the craving and clinging. The Mindfulness Factor is aligned with the Investigation of Mental Phenomena Factor, setting the circumstance for the Energy Factor (Operating as Persistent Right Effort) to either channel the energy of attention to the emerging self-state organization or away from it, depending on whether the potential organization is wholesome or unwholesome. This process is supported by the Awakening Factors of Joy (Enthusiastic Engagement), Tranquility (The emotional buffer that reduces the potency of craving), Concentration (Stability of attention that supports the integration of the other Awakening Factors) and Equanimity (Balance of Energy and Attention).

The cultivation of Dhamma Vicaya begins with the primary instruction regarding mindfulness of breathing: Focusing attention at the beginning of the inbreath--called *vitakka* (vee-tah-kah) in Pali--and sustaining attention for the duration of the inbreath--called *vicara* (vee-chah-rah) in Pali. These two functions are *cetasikas* (cheh-tah-sih-kahs), conditioning functions of mental phenomena, that mature, with practice, into dhamma vicaya. As one’s mindfulness of breathing practice matures, the ability to direct attention to the breath and sustain that attention is enhanced by “zooming in” to investigate the more subtle sensations associated with the breathing cycle. This enhanced attention increases the likelihood of remaining aware of the breath exclusively for extended periods of time and this cultivates samadhi/passadhi (sah-mah-dee/pah-sah-dee); samadhi is the Concentration Awakening Factor and passadhi is the Tranquility Awakening Factor. As this process develops, the stability and tranquility of attention supports the practice of vipassana, which primarily operates as a function of dhamma vicaya.

How does dhamma vicaya develop in the brain? Understanding the process of transforming new stimuli into the experience of selfing requires a review of some neuroanatomy:

The ***hippocampus*** is a collection of neural nuclei located in the limbic system, in the juncture between the top of the inner core of the brain and the cerebral cortex, which encapsulates the core of the brain. It functions to coordinate an extensive array of neuronal systems that associate new perceptions with memories stored in various areas of the cerebral cortex.

The ***amygdala*** is a collection of neural nuclei located in the limbic system that are located next to the hippocampus. It’s function is to interact with the memory associated perceptions processed by the hippocampus with this basic task: “friend or foe, food or poison?”. This orients further memory-based associations towards either seeking pleasure or avoiding pain.

The ***prefrontal cortex*** (PFC) functions to coordinate the memory-generated associations and feelings generated by the limbic system with an executive function—to either focus on and activate further neural activity and embodied behaviors or to inhibit them.

The ***default mode network*** (DMN), which is the normal wandering of the mind, what Buddhism calls “monkey mind”. This is a complex series of neural networks that dynamically connect various memory centers, creating the sense of self, of the “outside world” and daydreaming. Research strongly suggests that the training provided by mindfulness of breathing meditation moderates and diminishes the activities of the DMN—as a result, the mind is temporarily and conditionally free from the hindrances, and the dominance of the DMN is significantly reduced.

Systematically, when a stimulus activates any one of the “six sense bases” described in the Fourth Foundation of Mindfulness—seeing, hearing, smelling, tasting, somatosensory experiences and what is called autobiographical or episodic memory—these four neural systems interact, with the prefrontal cortex regulating the flow of subjective experience and any subsequent behaviors. There is a “bottom up” process—the activation of the sensory networks as processed by the limbic system—and a “top down" process, the regulatory functions originating from the PFC.

When practicing mindfulness of breathing meditation, the “top down” process involves vitakka and vicara, intentionally bringing attention to the “bottom up" process generated by the sensations associated with breathing and minimizing the creation of an internal narrative. This process, when persistently activated, provides two results: first, because the sensations associated with breathing are neutral in affect, the function of the amygdala is less excited, because affective drives are neutralized, and this promotes stability and tranquility of attention; second, a top down neural network is established and strengthened—energy travels through neuronal pathways from the limbic system up to the PFC and back down again, and the more this loop is activated, the stronger the pathway is—this is called “long-term potentiation” and supports the Awakening factors of Tranquility, Concentration and Equanimity.

When the top down process involving the PFC is interrupted by bottom up stimuli, which might include the DMN or any distraction that has some affective potency, the loop of stability and tranquility is interrupted. If the interruption is Mindfully investigated as it is forming and interrupted by the Awakening factor of Persistent Right Effort, it is inconsequential, but if attention is “captured” by craving and clinging, a hindrance forms. The more frequently the neural pathways of the hindrances are activated, the more long-term potentiation operates. This could also occur when the “signal strength” of dhamma vicaya related to the sensation of breathing is weak because there isn’t enough energy channeled persistently into investigating the changing nature of breath sensations. The power of the DMN is strong, particularly regarding self-identity, because it has been reinforced over the course of one’s life experience.

As meditation practice matures, the ability to persistently apply dhamma vicaya is strengthened, and it becomes possible to notice with active interest the nature of consciousness unafflicted by craving and clinging, contrasted with the times when the hindrances take over again. This can cultivate what is called viraga (vih-rah-gah), translated as dispassion or indifference, and the internal selfing story becomes diminished in potency and validity, disabling craving and clinging to the belief in an enduring/autonomous self. It also becomes possible to notice the changing nature of consciousness in an ongoing way, noting the arising and passing away of thoughts before they become convincing: “unsustained by (not clinging to) anything in the world.”

Ultimately, the intention involved in developing the Seven Awakening Factors is to maximize the functioning of the first three factors, Mindfulness, Investigation of Mental Phenomena, and Energy/Right Effort, which are integrated with the remaining factors. The mind is then in a condition that is optimal for realizing the futility of craving and clinging to the belief that there is an enduring/autonomous self, relinquishing this attachment, and experiencing at least a moment of transformational awareness of nonduality, the unconditioned, Nirvana.