

Hypothesis: The Self-Organizing Principle

Date : February 26, 2017

I thought I would try to clarify the underlying idea behind a [previous post about the election and Societal Emotional Process](#).

Everything here is, as always, a work in progress.

One hypothesis forming within my dissertation is that at least two natural systems, those of the mind/body unit (i.e. a single person) and family unit, may possess a common natural tendency toward health that is not yet formally recognized. This tendency is not a choice or special added feature, but as intrinsic to their existence as air's tendency to rise in water. I am provisionally coining this tendency *the self-organizing principle*. Because this idea first came to me through the practice of [Vipassan? meditation](#) which (at least initially) examines the the interaction of mind and body, I will begin by describing this principle in that context.

I hypothesize that if viewed as a complex system, or *unit*, the mind/body phenomenon has a natural tendency toward *ideal* organization. This tendency is counteracted by negative feedback in the form of sensory "fuel," and automatically begins to change toward *ideal* organization when negative feedback, or fuel, are reduced.

From the perspective of the mind/body unit as an open system, "sensory fuel" originates externally to the system and consists of at least food (e.g. pizza, movies, and free-trade organic kale chips) and information (e.g. sensory stimulation, emotional feedback via relationship). This external fuel modulates the internal life process or processes that defines the mind/body unit in its entirety. Roughly speaking, the unit is regulated and dependent on its environment according to the amount of fuel it consumes. Transfer of food is necessary for survival and replenishment of the material life process. Transfer of information is necessary to regulate and optimize the interaction with the external world.

In systems terminology, this sensory fuel serves as *negative feedback*, which serves to maintain *homeostasis* in the individual. In other words, it allows the life process to continue as planned. It is not hard to argue that all living things spend most of their time seeking out sensory fuel, whether it's food, relationships, sex, music, news, ideas, etc.

The self-organizing principle can be thought of as a program that defines how the unit adapts to changes in the quantity and/or quality of sensory fuel available. This program is intrinsic to the system's very existence just as attraction is to magnets with opposing polarities; it is not something that is added to it.

The concept is simple.

When there is plenty of the appropriate fuel available, the body/mind unit is relieved from some of the responsibility of modulating (controlling) it's own internal regulatory processes. When hunger goes up, a meal is given. When boredom goes up, TV goes on. Each time fuel is added, the unit is being regulated by its environment (Fleischman, 2016).

When sensory fuel is reduced, the system is forced to take up more of the responsibility of internal regulation for itself and slowly prepares for the new condition of less fuel to become the norm. For example, when the mind/body unit enters a food fast, the body automatically adapts and begins breaking down fats and other elements of the body that are no longer needed. The process is not necessarily comfortable, but reserve fuel is nevertheless found, and burned. The body is cleansed in the process, and to an extent the mind is cleansed as well. This process is automatic, and "re-organizes" the processes of the mind/body unit to better fit new conditions. If fuel is added again, it similarly re-organizes to adapt to the condition of more fuel.

While the self-organizing principle applies to cases of both feast or famine, it is the phase where less fuel is available that we are interested in. This is because it is in times of famine that the body seems to develop resilience. Fats and toxins are burned, internal processes become more auto-modulated, and the mind is freed of the burden of craving as much fuel.

However, fuel deprivation alone does not demarcate a shift toward *ideal* organization. In fact, fuel deprivation under unideal conditions can have the opposite effect. The self-organizing principle defines a *change potential* that is dependent on appropriate conditions, and the better that ideal conditions are met the more ideal the resulting systemic organization. That is, this program will work until a theoretical maximum of *total health* is reached. In vipassan?, this is known as the end of suffering. In Bowen theory, I believe this is known as a score of 100 on the scale of differentiation.

To address the question of ideal conditions, I add to the hypothesis that the object and quality of mental attention is the decisive factor in creating ideal conditions. I propose that the mind and body operate in a continuous feedback loop where sensations generated by change in the body are intimately connected with the functioning of the mind, and visa-versa. This is also the most important part of the hypothesis. As the intensity of change increases linearly during the process of adaptation, the chance that the resulting bodily sensations will overwhelm the mind increases exponentially. This poses a a threat to ideal conditions because the process of physical change cannot continue if the mind is not on board. For example, in a food fast one may distract the mind from the sensations of hunger with some other sensory stimulation such as music, hallucinogens, sex, interpersonal conflict, or by simply ending the fast and beginning to eating again. These kinds of reactions are automatic and nothing more than the mind becoming overwhelmed as the self-organizing principle begins to reveal itself.

It is easy for anyone to understand why the mind rejects these sensations of change; it is out of sync with what is known to be "normal experience." "I'm hungry," or "I'm too angry," or "I'm too tired right now," or "This is too boring," or of course, "This process is not for me." The process of change quickly becomes a test of mere tolerance rather than the finely attenuated and scientific effort that is required to generate enough *positive feedback*, or forces of change, for the system to reorganize toward its ideal state. Therefore, an amount of training is required to keep the mind steady amidst the turmoil of change.

In Vipassanā meditation, the only goal is to relieve suffering in all of its forms. Suffering is hypothesized to be caused by deeply automatic, unconscious reactivity to sensation. This automaticity is called *avijjā* (ignorance). Training begins with developing a capacity for single-pointed concentration in order to move on to a more difficult, panoramic development of simultaneous awareness of subtle sensation throughout the entire bodily, physical structure. Because every "experience" in life is sensory by definition, being able to feel the subtlest sensations throughout the entire physical structure is essential in order to develop equanimity to those sensations. Thus, an important stage in the practice is to be able to literally feel every single little point on the body, inside and out, and in literally continuous fashion. The Buddha's hypothesis states that it isn't possible to reprogram the mind to be less reactive until it can feel what it is reacting to in the first place.

As soon as a person reduces the amount of sensory fuel by sitting down to meditate, the natural healing encoded through the self-organizing principle begins. The mind/body unit immediately begins to *reorganize* the very moment that negative feedback is removed, similar to an outstretched rubber band that was allowed to contract and "rest." In meditation this tendency toward change is instantly revealed through the inability to concentrate or even to stay seated, as anyone who has tried to observe their breath for even a few minutes will attest. But if the mind can simply remain in contact with these natural sensations of change without reacting to them, the program continues indefinitely through many stages and with wonderful results.

The first part of the hypothesis is that this intrinsic tendency toward *ideal* organization exists, and requires nothing more than for the person to "get out of the way" and allow it to happen. The challenge they face is that the mind is usually too weak to let nature take its course. As soon as the change begins, one or another of the various excuses listed above becomes convincing enough to push the person out of seated position in search for more fuel. Developing a sufficient level of equanimity requires dedicated training in the ability to stay in contact with (i.e. literally observe continuously) the bodily sensations of change without reacting to them. This training is highly specialized and integral to the overall process. One can be the fittest athlete in the world, representing the embodiment of physical perfection, and find themselves just as incapable of observing their sensations as someone who has worked a dimly-lit desk job since they were 16 years old.

While I can't yet account for it, I believe that it is specifically the direct, unbiased, and literally

continuous attention to bodily sensations that closes the crucial loop of positive feedback required for the self-organizing principle to take effect. So long as the focus of attention is outside the body or broken in the slightest moment, the mind/body unit will not move toward ideal organization. This is because the self-organizing principle is natural and cannot be synthesized with any kind of fuel; it must occur yath?bh?ta? from the closure of this natural feedback loop through the observation of bodily sensation.

The second part of the hypothesis is that this self-organizing principle can be found in many other natural systems other than the mind/body unit. One such system of interest is that of the human family unit.

[Murray Bowen](#) (1978) hypothesized that the level of functioning of the nuclear family emotional unit has a significant impact on the functioning of each member, and that the most effective form of psychotherapy was probably one which a key family member is coached to differentiate from their original family unit. "Differentiation" in this context describes the ability to think, feel, and act for oneself when anxiety increases in the system. A more differentiated person possesses a limbic system which still reacts to real threats but safely ignores false threats, and as a result has more energy to devote to more mature and effective decisions for themselves and the family. The focus is on the nuclear family because Bowen found that the process was the most effective when it occurs in the context of the person's "*original* attachments" (Kerr & Bowen, 1988, kpp. 328)

When a problem arises with anxiety, a poorly differentiated family system will be less capable of adapting to the stress and will waste more energy on less efficient solutions to the problem (Kerr & Bowen, 1988). A more differentiated family system will still experience the same anxiety but will act less automatically and be able to respond more thoughtfully and effectively.

When a single member of an anxious family grows up and breaks the typical habit pattern of automatic reactivity to social pressure, the other members may sense that something is "wrong." Indeed, something *is* wrong when normed to the status quo. A single member growing up, particularly if this member is already well into adulthood, can feel to the rest of the family as though a contract has been broken. The family protests the breaking of the contract, possibly through progressively intense phases depending on the severity of the change. However, if that key individual can continue thinking and acting for themselves without getting pulled back into the old habit pattern of simply adopting others' opinions as one's own, the self-organizing principle begins to reveal itself as the family system reorganizes around the new-found maturity of the key member. Bowen (1978) writes of the predictability of this process,

When any key member of an emotional system can control his own emotional reactivity and accurately observe the functioning of the system and his part in it, and he can

avoid counterattacking when he is provoked, and when he can maintain an active relationship with the other key members without withdrawing or becoming silent, the entire system will change in a series of predictable steps. (kpp. 486).

I hypothesize that the family unit possesses a similar or identical tendency toward ideal organization as the mind/body unit. The "fuel" in the case of the family is the automatic reactivity of its members, which only serves to keep things the way they are, i.e. to ensure the survival of the unit at the expense of its least differentiated members. When a single member simply "gets out of the way" of the self-organizing principle, by lowering their own reactivity and speaking closer to the truth instead of playing pawn to the emotional system, the system will predictably adapt for the better.

Similarly, when a meditator sits down and removes the "fuel" of sensorstimulation, and subsequently stays in contact with the bodily sensations of change without encouraging or avoiding them, the mind/body system will begin to change in [a series of predictable steps](#) as outlined in the Buddha's discourses. When a family member grows out of automatic child-like dependence on the family, the emotional system of the family protests with "sensations" of change, at least initially. When a vipassan? meditator rejects the automatic craving of sensory stimulation, the emotional system protests with sensations of change, at least initially.

I propose that these two "systems," the family unit and the mind/body unit, share at least a few basic principles of operation, one of which being this "self-organizing principle." I further propose that the mind/body unit experiences "sensations of change" through the same anatomical structures (e.g. the limbic and somatosensory system) whether they are "from" the family unit or "from" the mind/body unit, and that the self-organizing principle applies to both systems as dictated by those structures. This unified anatomical structure implies that these two units are indeed [holons](#), simultaneously a whole and a part, in the same natural phenomenal system.

It is easy to assume that the instructions and qualifications of a proper guide differ for each unit, but the principle of natural, *ideal* self-organization remains the same. Bowen observed a tendency of families to respond to stress in predictable ways which he defined through the concepts of Bowen theory. The Buddha observed the origin of suffering which he defined in [pa?iccasamupp?da \(the second noble truth\) as a feedback loop between mind and body](#). As far as I can tell, it is the radical adherence to the principles of science that these two theorists share and sets them part from their contemporaries (Bowen, 1978; Hart & Goenka, 1987; Kerr & Bowen, 1988).

In his ten-day discourses, S. N. Goenka (1987) frequently calls the self-organizing principle "the dhamma" (skt. *dharma*), or the "law of nature" (pp. 14). Paul Fleischman (2009), a senior teacher in the same tradition describes it thus:

It is an information state, a compound of incalculable amounts of information. Humans can understand this information by reason, and can experience its processes within themselves through Vipassana meditation practice. We contain the information state of the universe (pp. 24).

In the spirit of [E.O. Wilson](#) (1998), what does it mean to find consilience in two otherwise unrelated fields, that a figure of modern science like Bowen described a fundamental feature of the life process on such strikingly similar terms as an ancient figure like the historical Buddha? How might this change the way that we look at suffering and its relative causes?

NOTE: You can read another description of my "self-organizing principle" in a [previous post on societal emotional process](#), which uses different language and goes more into detail about how the process looks in action and applies across the [holonic landscape](#).

References

Bowen, M. (1978). *Family therapy in clinical practice*. Lanham, MD: Jason Aronson, Inc.

Hart, W., Goenka, S. N. (1987). *The art of living: Vipassana meditation as taught by S.N. Goenka*. Onalaska, WA: Pariyatti Publishing:

Fleischman, P. R. (2009). *Vipassana meditation and the scientific world view*. Onalaska, WA: Pariyatti Publishing.

Fleischman, P. R. (2016). *Our best and most lasting gift: The universal features of meditation*. Onalaska, WA: Vipassana Research Publications.

Kerr, M., Bowen, M. (1988). *Family evaluation*. Lanham, MD: Jason Aronson, Inc.

Wilson, E. O. (1998). *Consilience*. New York, NY: Alfred A. Knopf, Inc.