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Awareness and Discernment Lead to Homeostatic Integration: A Research on The Mechanisms of Psychoneuroimmunology in Ayurveda

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ABSTRACT

There are advanced therapeutic modalities and protocols as part of the broader discussion of Ayurveda. It is imperative to understand that all of these are based on a deeper understanding of how choiceless awareness integrates the neurological, immune and metabolic systems with psychological processes to function as a whole. These systems are homeodynamic because they are organized at points of their behavior where they lose stability. The mechanisms of causation of imbalance and disorder negatively affect this level of integrity. In this research article, we present an innovative framework and pedagogical approach that is recreated from ayurvedic knowledge to describe and facilitate integration within aforementioned and other systems. Within this context, we interpret integration as systems acting together as a whole, which makes them fundamentally interconnected. We also present a set of axioms as the basis of the unifying theory, pedagogy, and educational practice in ayurvedic psychology. This research offers the tools to understand, explain and assess events within the consciousness of individuals to facilitate integration. Where applicable, we reference other authors.

Keywords: Ayurveda, Consciousness, Discernment, Homeostatic, Homeodynamic, Psychoneuroimmunology, Psychology

Introduction

"The impairment of intellect, will-power and memory cause the derangement of the psychophysical balance that in turn causes mental and other disorders of structure and function." Caraka Samhita [1] (Ca. Sa. 1/102 - 108).

The above passage is taken from *Charaka Samhita* or the compendium written by Charaka, one of the most important treatises in Ayurveda, an ancient Indian system of medicine that has a written history of more than three thousand years. The specific passage above describes the pathogenesis or the

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disorder take place. In Ayurveda [2] it is defined as pragyaparadha. This sets in motion a six-stage developmental process (shatkriyakala) [2] that localizes the three invisible fields [2] (prana, tejas and ojas) and their corresponding psychophysical humors or doshas [2] (vata, pitta and kapha). As a result these fields become denser, which reduces the dynamic capacity of the corresponding system to find balance. Prana is a subtle field that influences through kinetic-electricity; tejas through magnetic-transformation and ojas through gravitational integration. Hereafter they are referred to as "invisible fields" or "PTO fields". Vata dosha (wind) creates space and movement; pitta dosha transforms and compresses and kapha dosha further compresses and structures. Hereafter these will be referred to as the "humors" or "VPK". When these subtle invisible fields and psychophysical humors contribute to balance, they act together as a whole, creating a sense of internal harmony and flow.

essential mechanism by which causation of imbalance and



When one or more humors become localized or dense, the mind and body's dynamic capacity to find balance or homeostatic integration is reduced. Hence, the denser a humor becomes, the less homeostatic integration can act to find balance. Alternatively, when PTO and VPK are rarefied or spread out, they have a flow-like quality that enables them to dynamically rebalance mind and body. For example, fundamental research in ayurvedic psychology has shown that when a person feels fear, the body tends to become tense, it contracts space and limits movement, which is a limiting or localizing expression of prana and vata.

When individuals experience choiceless awareness, they'll notice how awareness presents a stable and unifying field, relative to which mind can discern, recognize, understand, and integrate limiting ways of thinking, feeling, and sensing. This continually integrates and rebalances the mind and body.

Fundametal Principles

The aforementioned mechanism of causation of imbalance and disorder is linked with an underlying "language of emotions" that dynamically structures mind and body to function less spontaneously, similar to the influence of abusive language over the natural use of a language. This endogenous language of emotions, which through dysfunctional and endogenous response patterns produces incoherencies, will be described in more detail throughout this paper. An endogenous response acts from within the mind and body to protect one from harm. The main characteristics of response patterns are that they are learned (conditioned), they are automatic, act from beneath the conscious level and interfere with natural expression, simultaneously on the spiritual, intellectual, emotional, bioenergetic and physical levels. The influence of this language of emotions can be experienced in most areas of an individual's life, typically when a person feels unsafe. At this time the person relates to self, others and the immediate world outside through a combination of three endogenous or inner responses [3] viz. fear, sadness and or rejection. When objectively visible, these responses show up as control, anger and dissociation respectively. For example, one can observe the inner response of fear when a person is under the influence of stress [4]. This response tenses the body.

The three endogenous responses localize and therefore densify the invisible fields prana (kinetic-electricity), tejas (magnetic-transformation) and ojas (gravitational-integration), which in turn localize or densify the three humors or doshas (vata/wind), pitta/bile and kapha/phlegm). Whenever these invisible fields and humors become dense, they suppress natural urges and interfere with the normal expression of mind and body. What's more, they tend to make one identify with objective form and fragment how one experiences the objective world. The following models the dynamic mechanism by which external stimuli trigger limitations in the invisible fields (prana, etc.), properties (space, movement, etc.), humors (vata, etc.) and the physical reality. Consciousness dynamically unfolds as invisible

fields that cannot be localized. The dysfunctional endogenous responses keep the invisible fields from regaining their flow-like quality (Figure 1).

The model in Figure 1, was recreated from fundamental ayurvedic theory. Unlike linear models, it can only be read in its entirety as it represents the "whole", which is more than the sum of its functions. As a result one cannot observe one field or humor in isolation. One needs to always describe the field and or humor in relationship to all other functions. This ayurvedic way of modeling, holistically describes how systems are dynamically recreated every moment during a process.

In figure 1 one may view choiceless awareness in the center of the model. This formless potential expands as the invisible PTO fields that precede concrete form. Through the materializing properties (pancha mahabuta) (space, movement, change, compression and structure) the invisible fields are made manifest as the five elements (pancha bhuta) and as the three humors (doshas). Each ring around choiceless awareness further extends consciousness into more concrete form. The solid lines describe how choiceless awareness expands into the invisible PTO fields and the way these PTO fields translate as materializing properties. The dotted lines describe the possibility that this dynamic uses feedback (listen) to find balance; and the possibility that the materializing properties are made concrete as the elements (ether, air, etc.) and as the humors (vata, pitta and kapha). What's more, within each ring all functions are inherently interconnected. Similarly, there is a mutual connection between the expanding rings. Hence, when a function changes, the rest of the functions change with it.

The dysfunctional endogenous responses densify the invisible *PTO* fields and limit their capacity to find balance. This creates an imbalance that simultaneously manifests in the ring of the materializing properties, elements and humors, all at once.

Self-Organization

Modern systems science [5] has had a major influence on the understanding of self-regulating systems, human perception and understanding, in particular in the fields of biology, linguistics, and sociology. Systems science is also based on the premise that the whole is more than the sum of its parts. Through its symbolic language it describes how different parts of a system function in synchrony through control and feedback mechanisms [6], expressing as the process. The framework that we have defined and delimited as a contribution to ayurvedic psychology, includes systems science approaches using a set of axioms which not only apply to the anatomy, but also to the physiology, psychology and other areas. The aforementioned framework extends this with a description of the invisible PTO fields that through control and feedback mechanisms dynamically create the self-regulating process. In figure 1 "control/operation" is a function of prana, "regulation" a function of tejas and "feedforward/feedback" a function of the loop between prana and tejas. The latter



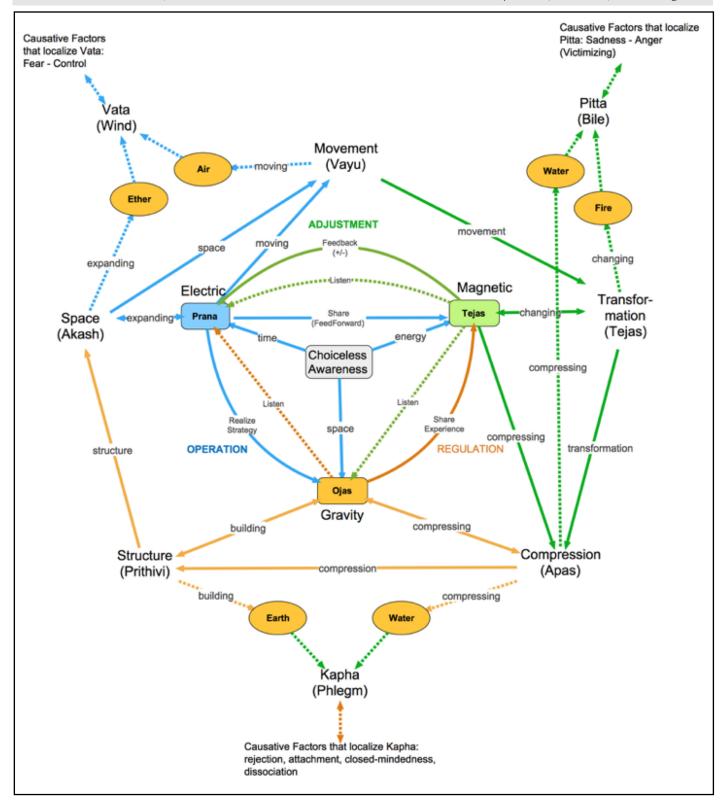


Figure 1: This model describes how the invisible *PTO* fields simultaneously manifest as materializing properties (*pancha mahabhuta*), elements (*pancha bhuta*) and the physical humors (*doshas*) - *VPK*. It also describes how the dysfunctional responses create the conditions that densify the humors.

continually seeks to readjust the system to restore balance. This dynamic can be mapped to any system, including all of its parts. What's more, the PTO fields interface the mind-body

with its dynamic functions. Whenever a physical or psychological function needs to manifest, volition and attention direct the underlying PTO fields to manifest as that



function by means of the manifesting properties (*mahabhuta*), elements (*bhuta*) and humors (*dosha*). Energy follows attention! After a task involving different functions has been completed, the PTO fields regain their original rarefied or flow-like state. When learned responses are involved, the system "resists" the restoration of the flow-like quality of the PTO fields and loses its capacity to adjust itself to internal and or external change.

Modeling Perception

The framework that we contribute to ayurvedic psychology upholds that human beings are aware of the threedimensional reality, including how change takes place in the invisible fields, in the process and the different parts of the mind body, from a choiceless awareness [7], that is beyond one's personality is a quality that enables one to objectively observe all aspects of experience without any additions or subtractions to it. Ayurvedic psychology further maintains that choiceless awareness is always present as the *transpersonal self* [8], in Sanskrit referred to as *purusha*. Choiceless awareness can at any given time be accessed as an *Objective Observer - OO(0)*. The *Subjective Observer (manah)* which acts through intellect (*buddhi*), desires (*manas*) and ego (*ahamkara*), dynamically affects embodied experience through the faculties of thinking, feeling and sensing. In linguistics,

SPECTRUM OF EXPERIENCE

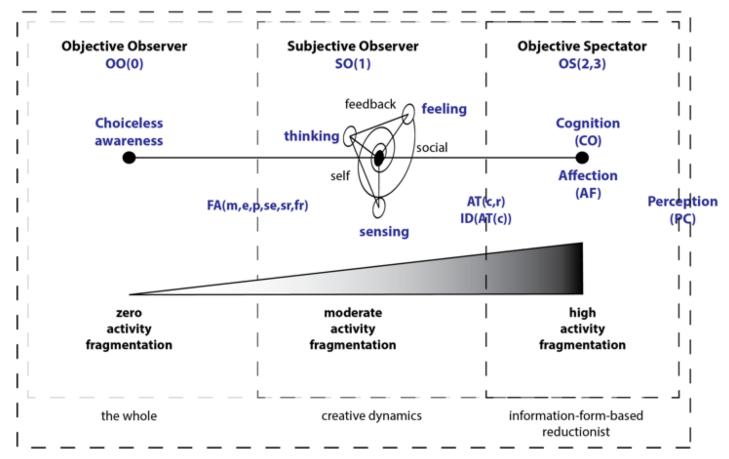


Figure 2: The whole spectrum of experience.

OO(0) – objective observer – choiceless awareness	
FA (m,e,p,se,sr,fr) (Functional awareness)	m = mental; e = emotional; p = physical; s_e = self-relational; s_r = social relational; f_r = feedback relational
SO(1) – subjective observer – first person	Filters => t = thinking; f = feeling; s = sensing
AT(c,r) (attention)	c = concentrative; r = receptive/stimulus-driven
ID(AT(c,r)) (Identification – mediated by concentrative attention	c = concentrative; r = receptive/stimulus-driven
OS(2,3) - objective spectator - second and third person	
AF - affection	
CO - cognition	
PC - perception	
OR - objective reality	



the Subjective Observer is referred to as the first-person – SO(1). The Objective Spectator (drastuh) perceives, relates to and cognizes only objective experience, behavior, communication from different relative 2nd and 3rd person perspectives - OS(2,3). Furthermore, Functional Awareness (mental, emotional and physical awareness, etc.), describes the relationship between the Objective Observer - OO(0) - and the Subjective Observer - SO(1). Attention (concentrative and receptive) - AT(c,r) - plus IDentification which is guided by Concentrative Attention - ID(AT(c)) -describes the relationship between the Subjective Observer - SO(1) and the Objective Spectator - OS(2,3). Affection - AF -, Perception - PC -, and Cognition - CO -characterize the relationship between the objective spectator - OS(2,3) - and the objective reality - OR [Figure 2].

The perceptual vantage points (objective observer, subjective observer and objective spectator) described in figure 2 are simultaneously accessible. However, it has been observed that most individuals have learned to "exclusively" identify with and relate to the objective reality on the basis of concentrative attention - ID(AT(c,r)), where "r" (receptive attention) mostly approximates 0. This disempowers whatever one is aware of from the Objective Observer - OO(0) - and discerns from the Subjective Observer - SO(1). Thus, our hypothesis is that the more one identifies with the objective reality, the more one is influenced by events in that objective reality. For instance, if we consider a situation in which a person converses with a colleague about a subject of common interest. Suddenly one feels triggered emotionally by what the other says. Now, the person who feels victimized raises his/her voice to defend his/her position, on the assumption that what one reflects is an absolute truth. Identification with what is called up from the unconscious is what is projected between the two. Identification plus automatic response-patterns keep recreating an internal divide, which is then reflected in relationship.

Alternatively, an individual or group can be shown how to be present as choiceless awareness and discernment from the Objective and Subjective Observer points-of-view, which awakens the full spectrum of attention – AT(c,r) – (dharana) while balancing identification – ID(AT(c,r)) – (pratyahara) with the objective reality. This implies that one is receptive to the complete spectrum of perception, while one may choose to pay attention to part of that spectrum through concentrative attention. This enables the individual to be present to the environment, while reflecting the power of discernment (vidya) of the Subjective Observer and choiceless awareness (dhyana) of the Objective Observer. In this interaction, the individual will learn to choose wisely (yama and niyama), experiencing a flow-like quality in movement, posture (asana) and breathing (pranayama). Patanjali described this as "the seer who abides in his own nature" [9]. This is defined as one's true nature (samadhi). Accessing the complete spectrum of experience all at once is referred to as wholeness (sarvata).

Scientific Paradigms

While conventional science tends to objectively view and collect evidence by only taking into consideration what is cognized and perceived from the objective spectator – OS(2,3) pointof-view, ayurvedic psychology cultivates an understanding (vigyanam) based on the whole spectrum of experience, simultaneously from all points-of-view. The unbiased observation from the objective observer thus reveals any internal or external change, enabling self-organization on different planes. Sound reasoning (anumana), based on direct personal observation (pratyaksha), from the whole spectrum of firsthand experience, is the most trustworthy of sources of knowledge.

Endogenous response patterns of fear, sadness and rejection tend to cause imbalance by localizing the invisible PTO fields, and reducing the dynamic capacity of the individual to find equilibrium. By dynamically relating to the emergent properties that cause these response patterns to disrupt the balance, ayurvedic psychology aims at facilitating a synchronistic and flow-like experience that is consistently repeated throughout the mind and body through the invisible PTO fields.

Learned Response Mechanisms

William James (1890) [10] described that habitual patterns are actions and thoughts that are seemingly automatic, diminishing the conscious attention the individual needs to pay to his or her actions, making it easier to perform, but more resistant to change. Furthermore, he suggests that habits are the most prevalent obstacles to growth in daily life. New possibilities are prevented through resistance to change. The following describes this from an ayurvedic psychology point-of-view.

Chaos in one's relation with society results from traumatic experiences. This impairs a person's sense of reality and tends to block and confuse a person's memories, upsetting one's belief-structure and the way one communicates and relates with others. The limiting ways of thinking, feeling and sensing (filtering) that result from this impairment and confusion, lead to suppression of inner felt natural urges and resistance to integration and change through habitual patterns. The mechanisms underlying habit patterns, involving previously mentioned endogenous responses (fear, sadness and rejection) are characterized by *automaticity*, which takes away attention from one's actions; "unconscious processing" and localized "haptic sensations" that can at times become systemic. Unconscious processing implies that these mechanisms are mostly elicited from below the conscious level.

Haptic sensations can be physically felt within the body, mostly subcutaneous, in organs, muscles and in the weakest parts of the body. Examples of haptic sensations are physical tensions, burning sensations, blocks or heaviness in particular parts of the body. For instance, persons who feel fear of speaking in



front of an audience, generally report having contractions in the throat, chest and or abdomen. An example of a systemic response of fear is the flight or fight response that takes control of the whole body, instantly altering the physiology. So, the same inner response of "fear" can manifest locally as well as systemically.

In time, response-patterns and projections form the stratagems by which one protects oneself from feeling hurt by others. One way in which one develops patterns is by observing one's parents deal with challenging situations. When individuals grow up, the combination of identification and conditioned response-patterns keep them from bringing awareness to their embodied experience, which disrupts how they feel and communicate in relationship.

The Language of Emotions

Discomfort, imbalance and disorder of structure and function are multidimensional in the way they are caused, and simultaneously manifest on all levels of experience viz. mental, emotional, physical and even the subatomic levels. The following describes the language-like characteristics, structure, and dynamics by which endogenous responses influence everyday experience. The previous parts and graphic representations form the basis for this following explanation.

All mind-body effects are mediated by a combination of electrokinetic, magnetic-transformation (chemical) and gravityintegration, which are all based on electromagnetism and gravity. The electromagnetic nature of the mind-body is well documented by the scientific community, e.g. the strong evidence provided by Electroencephalogram and Electrocardiograms [11]. This implies that aforementioned haptic and systemic sensations are also expressions of endogenous EM fields.

Research carried out by V.S. Ramachandran et al. [12], suggests that the above-mentioned mechanisms of causation through endogenous response-patterns persist even after amputation of a limb, expressing as pain and other learned responses that have a "physical" expression in "phantom limbs." The group discovered that these responses were learned through traumatizing experiences, and could therefore be unlearned. Their work includes unlearning certain limiting responses through visual feedback using mirrors. The group is still trying to find ways to deconstruct the mechanisms by which these haptic sensations express in phantom limbs.

Based on our observations during the past two decades, the following chart was composed of the three endogenous responses and the different ways in which they express within the body, locally or systemically. An overview of the endogenous responses and their expressions is given in Table 1.

Response patterns, constituting a language of emotions, are learned in a similar way as a native language, which happens most intensively during the first six years of a child's life. While the former is based on a dysfunctional emotional exchange with one's environment, the latter is learned while having a functional perceptual, emotional and rational exchange with the same environment. What's more, when response patterns

Table 1: This table categorizes the three endogenous responses and the form in which they may express in mind and body, when triggered.

Fear (control)	Sadness (anger)	Rejection (dissociation)	
Alertness Tension, stiffness Cramp, Contraction Stinging, Sudden temp change Electric-like sensations Dizziness Restless Nausea Bloated (aversion) (causes <i>vata</i> imbalance)	Vulnerability Burning Heat Prickly, Oversensitive Irritated Swollen Inflamed (causes pitta imbalance)	Dissociation Heavy Blocking Pressing Absent Lethargic Too much sleep Feeling tired all the time (causes kapha imbalance)	

Powerlessness - All three responses combined as pain

Free Will – absence of all three responses



are called up in different situations, they interfere with one's ability to communicate naturally and authentically. Research across the boundaries of early learning research, psychology and linguistics point in this direction. In the example where a person feels fear of speaking in front of an audience, the sensations in the throat, chest and or abdomen limit one in the way that person communicates. Choices concerning the ways, in which groups of individuals communicate, eat, live and relate, are mostly learned from one's social environment. This results in aforementioned endogenous response-patterns that act from below the conscious level.

Charaka's quote at the beginning of this paper suggests that the imbalance at the level of the psychophysical humors or doshas is caused by a distorted sense of reality, and accompanied by conditioned response patterns that seek expression through mind and body. Response patterns become more physically anchored over time, reducing the dynamic capacity of mind-body to find balance. This results in misalignment of the nervous, metabolic, and immune systems. The shatkriyakala or six-stage developmental process of disorder of structure and function is the result of this misalignment.

How Response-Patterns Affect Communication

The existence of endogenous responses can be observed in all areas where one responds to the immediate world outside and inside, for instance, to one's social environment (external) or to painful memories (internal).

The following describes a situation wherein the endogenous response of fear directly influences the way one responds to one's environment. As in the aforementioned example, a person feels fear of addressing a large audience, and senses a contraction in the throat. In another example a person feels sad, senses a burning sensation in the throat and chest. Because these sensations are caused by habitual patterns that act from below the conscious level, most people aren't aware what they represent, and thus take them for granted.

Based on our research observation, the way responses affect interpersonal communication is categorized below. These inner responses simultaneously affect a person's behavior, and the way that person reacts emotionally within different situations, including the way s/he speaks and the choice of words.

- Fear/Control response resonates as a throat sound, high pitch, tenseness, roughness, fast pace; shallow, contracted and over-control in breathing. This response diminishes the volume, while a sense of control raises the volume by projecting the same quality of sound outward.
- Sadness/Anger response resonates as a sound in the chest and abdomen, as middle pitch, warm to hot quality, moderate pace and under-control in breathing. This response "weakens" the voice, while anger overpowers by projecting the same quality of voice outward.
- Rejection/Dissociation response resonates throughout the

body and specially in the lower abdomen. Bass pitch; heaviness, slow pace and blocked breathing (mostly chest, throat and solar plexus) may be experienced. This response blocks the volume and dissociation makes one fall silent and disconnect from others.

Influence Through Transference

While observing how participants in a group communicated, it was apparent how they would take turns sending and receiving responses. It has become evident that conscious and unconscious intention can modulate (counter) transference, which carries responses across physical boundaries. Transference is said to take place from below the conscious level, propelling one into polarizing discussions, argumentation and sometimes worse. Research by Robert Jahn and Brenda Dunne at the ICRL [13] confirms this observation.

When individuals within a group learn to be fully aware and discerning together [14] the mechanism of (counter) transference can be effectively recognized and integrated. This allows these individuals to communicate more authentically, with greater cohesion and interpersonal coherence.

Integrating Your Self is Integrating The World

One's capacity to witness and discern informs one about the embodied experience. Whether one is profoundly asleep, dreaming restlessly, feeling emotionally isolated or sensitively empathic with others, the mind is constantly informed of these states by choiceless awareness. When awake, choiceless awareness constantly interconnects thoughts, feelings and sensations, with how one behaves and acts. It also relates what happens in one's environment with what one experiences internally and vice versa.

Modern epigenetics research [15] suggests that genes and DNA do not control biology. Instead DNA and energy-information exchange are controlled by signals from outside the cells. Likewise, human beings are open systems, and therefore in a constant exchange with their environment. Experiential learning through exploratory research has shown how human beings communicate with the world through seven different centers that each cover different domains of experience. Each domain plays a different role in the integration of external and internal stimuli. In Sanskrit these centers are referred to as chakras (subtle) [16] and marmas (physical) [17]. In the next figure, these centers are represented by circled dots. The large numbers of peripheral dots represent sub-marmas within the body. All functions and sub-functions are unified through a bioenergy network of interconnected channels (nadis) [16]. What interconnects all of the above is choiceless awareness.

Table 2, describes the seven centers and their domains of conscious experience and communication, attention, and mental and emotional activity. These aspects of



communication relating to these centers (Chakras) can also be perceived at the level of the associated neuroendocrine glands (Figure 3. Chakra / Marma chart).

By continually being aware and discerning, one has the capacity to monitor, recognize and let go of limiting ways of perceiving, thinking, feeling, and sensing. As choiceless awareness remains present to one's subjective and objective experience and way of communicating, it acts as a form of homeostasis or *dhatusamya* [2]. Ideally to choiceless awareness supports integration of activity, perception, and action. However, the world is far from ideal.

The social conditioning and traumatizing experiences that most people go through make them feel unsafe. This is how individuals develop endogenous response-patterns of fear-control, sadness-anger, and rejection-dissociation that disrupt one's capacity to integrate experiences through the above seven communication centers. These response-patterns aim at protecting one from being hurt by others, but end up reducing the individual's capacity to integrate internal and external stimuli. What's more, they keep painful memories from being processed and integrated. Moreover, when a response-pattern acts within a domain, it pulls away the bioenergy of the system

that would otherwise be used by psychophysiological processes.

For example, when a person feels rejected, and his/her "will" is blocked, this decreases that person's digestive fire to a minimum. Even if that sense of rejection is imagined, via the response-patterns it creates a real obstacle within oneself.

These pre-emotional response patterns express not only mentally, emotionally, bio-energetically, but also physically. And the longer response-patterns affect certain parts of the body through the invisible PTO fields and through the humors VPK (doshas) referred to as sthana samshaya, the more the tissues (dhatus) within these parts of the body decrease, ultimately resulting in the appearance of symptoms (vyakti) and the disorder of structure and function (beda).

Decoding Memories and Homeostatic Integration

Individuals communicate on the basis of feelings and emotions, which express in the way they communicate. According to Siegel [18], what one feels interfaces biological processes with human relationships. Just as computer languages

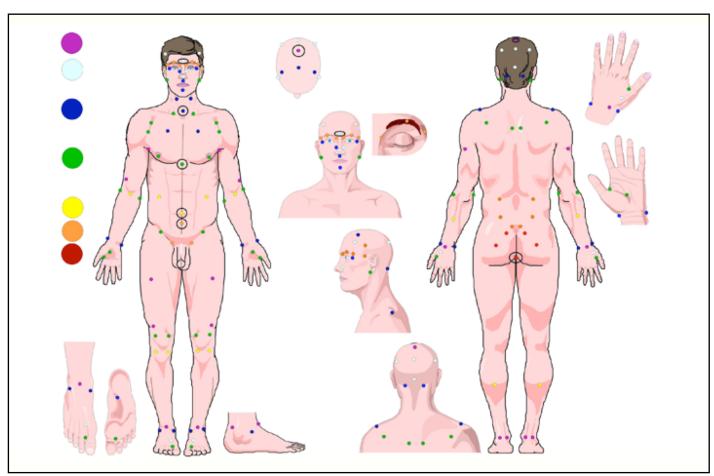


Figure 3: The 107 marmas or vital points and how these group around seven main centers (circled dots).



Table 2: Description of the chakras, the endocrine gland and the domains of experience that these covers.

Centers	Marma	Domains of Experience
Existential Interpersonal (Pineal)	Adipati	Self-integration - all the ways in which one relates to the world are integrated. Time-based integration - only the present moment exists; Structural integration - integration of different anatomical structures;
Communication (Pituitary)	Sthapani	Bilateral integration - integration of hemispheres of the brain and heart and brain; Narrative integration - coherence in how and what one speaks about; Memory integration - memories are processed and integrated;
Expression (Thyroid)	Nila-Manya	Emotional state integration - integration (acceptance) of different emotional states; Voice integration - wherein the spectrum of frequencies become aligned;
Connection (Thymus/Heart)	Hridaya	Interpersonal integration - feeling a subtle bond with other people;
Will (Pancreas/Navel)	Nabhi	Social integration - a sense of unity among members of a group or society;
Action (Andrenal/Bladder)	Basti	Functional integration - functionally integrating physiological and psychological processes;
Existential Personal (Muladhara/Root)	Guda	Conscious integration - integration of functional awareness (mental, emotional, physical, self-relational, social-relational and feedback-relational);

translate to and from a binary code (1's and 0's), human language translates to and from an internal mental-emotional coding system that is influenced by the endogenous responses, translating to the body's hormonal balance and at the DNA level translating to an electromagnetic balance. Peter Gariaev's Linguistic Wave Genetics research [15] shows the essential mechanisms by which integration takes place at the DNA level. Ayurvedic psychology observes that the whole body at the level of energy-information exchange potentially stores unprocessed painful memories (samskaras) that have been deposited through social conditioning and traumatizing experiences. These painful memories and the response-patterns that keep these memories hidden can be read experientially when triggered by different circumstances. Triggering is a mechanism wherein an internal or external stimulus is received that resembles and calls a stored painful memory. The seven centers (chakras) that were previously described are responsible for integrating these stimuli. After being triggered, the "memory" activates a pattern of endogenous responses (karma) that limit coherence. This interferes with the normal function of the mind and body and at times becomes visible as an emotional response, seemingly directed at the sender of the external stimulus. Between the time the stimulus is received - t(0) - and the time the response becomes objectively visible - t(1) - the stimulus and the endogenous responses travel through different pathways and, before becoming visible as the objectively visible emotional response. Three examples of the internal expressions of endogenous responses are 1). Haptic sensations experienced in

phantom limb pain; 2). stress responses, and 3). feeling emotionally blocked or being disturbed psychologically.

The mistaken sense of reality in combination with the endogenous response-patterns, in Sanskrit referred to as pragyaparadha, are the root cause of a person's objectively visible response (prarabda karma) that results from one's actions accumulated in the past (sanchit karma), which keep the associated unprocessed memories (samskaras) hidden, producing new (painful) reactions (agami karma) in the present. While objectively reacting from aforementioned response-patterns, new impressions are created and deposited. Thus painful memories are worked out through response-patterns [9]. The cycle repeats itself, over and over again, until the individual awakens to these unconscious mechanisms.

When awareness and discernment are brought to these mechanisms, the painful memories and associated emotions are unlocked, subjectively perceived, felt empathically, processed, and integrated. As a result, a cathartic transformation can be experienced on all levels. This brings one to new levels of awareness, discernment and empathic sensitivity.

The coherent field that choiceless awareness presents at the level of the invisible PTO fields, absorbs and integrates the incoherencies that the painful memories through the endogenous responses create. After each cycle of integration or



healing response, the mind-body regains a more coherent and flow-like quality of expression, until the next painful memory arises. When choiceless awareness is sustained during longer periods of time, in combination with ever-increasing levels of discernment, one becomes disidentified with the effects of the responses, while being completely open to experiencing wholeness. This accelerates the integration process. While one rewrites how the past is experienced in the present, one gradually sinks into feeling whole all the time.

The role of ayurvedic psychology [3] [19] is to guide learners towards being consciously aware, cultivating discernment through direct feedback. This allows learners to consciously process painful memories, without being identified with the same. Instead of being pulled in different directions, the learner feels at peace.

Integration Through Ayurvedic Psychology

Ayurvedic psychology offers an educational approach, a form of inner cultivation that assists in expanding the capacity of learners to become grounded in choiceless awareness. Choiceless awareness presents a unified field, a form of homeostasis, relative to which one can observe, read and understand how endogenous responses continually influence one towards imbalance. When referring to this capacity to organize the mind-body at the point where it tends to become imbalanced, the term homeodynamic [20] applies. This is the literal meaning of the term "dosha". When balance is restored within mind body, it can better reflect the unity or homeostasis that choiceless awareness represents. This is an innate capacity that most individuals lose due to upbringing and social conditioning.

Subsequently, learners will be able to reinvent their mentalemotional framework, recreating their lived experiences and perceptions of wellness and sickness. One will be able to consciously elicit the "placebo effect" [21] as a healing response to rebalance one's own mind and body. Apart from freeing oneself from limiting responses, the process that ayurvedic psychology facilitates, also helps reshape one's cultural myths, values, goals, beliefs and meaning.

Choiceless Awareness Integrates and Sustains Therapeutic Effects

When choiceless awareness and discernment are sustained over longer periods, the learner becomes ever more sensitively aware of the way mind and body function on different levels, and can bring about a different course of development. Through this first-person "observer effect" and through conscious intention, internal systems and functions shift towards coherence.

As learners undergo ayurvedic or other forms of treatment,

such as taking herbal supplements, massage or cleansing, they learn in action how these treatments dynamically affect their body, mind, and spirit. They can consciously receive, integrate and sustain the effects of any therapy that strengthens the capacity of the mind-body to rebalance itself. Alternatively, when overly identified with the objective reality, endogenous responses block one from being aware, discerning and present to mentioned therapeutic effects.

As learners become consciously and sensitively involved in the care for their own health, they feel empowered to choosing a more healthful diet and lifestyle. What's more, the everevolving awareness and sensitivity to the subtle invisible PTO fields that fuel physiological and psychological processes, constantly elicit healing responses or integration on all levels. This may be experienced as subtle vibrational signals or carrier waves that can be magnified and directed through conscious intention.

Ayurvedic Psychology and Yoga

Meditation, including modern practices such as Mindfulness, emphasize shifting attention to what is experienced subjectively. But, when one cannot discern "what" expresses through the mind-body, endogenous responses can take over and make one disconnect from whatever painful memory is triggered. Because they act from below the conscious level, endogenous responses are generally not recognized. Hence, even though one becomes a passionate meditator, one may still repeat the same patterns of suppression and repression, which as observed, can be attributed to painful memories and associated endogenous response-patterns. Meditation can be used as a way to escape habitual patterns. One may benefit from surface changes, however deep transformation may not happen unless discernment and awareness are brought into the equation.

Social conditioning is such that it makes people feel inadequate, not whole and therefore in need of fixing. This may also be the motivation behind the need of some meditators to disconnect from the present reality. Generally, meditators assume that the mind needs to be quieted. Some meditators report separating from the present reality and having spiritual experiences accompanied by lights, colors and sounds. They may even experience some degree of bliss. But, any separation from the present reality constitutes a division, and may therefore be attributed to a habitual response of rejection or dissociation.

Those who are aligned with the present reality, without being discerning, may feel a clear disconnect from their embodied experience. Some meditators report not being able to feel their bodies. As in the previous case, this too is a form of dissociation, which may at the time be perceived as something positive. Meditators who remain "sensitively" aware of their mundane life may experience spiritual crises. The responses (fear, sadness and rejection) and underlying trauma may



disrupt the meditator's inner peace and sometimes overwhelm one emotionally. These crises may be weak, moderate or strong. Individuals have reported experiencing disrupting spontaneous physical movements (*kriyas*) [16] and energy disturbances in the vital points (*marmas*).

There are some forms of yoga, such as the *Integrative and Vethathiriyam* [23], Amrit Method (I AM technique) [22], which emphasize discerning inner responses to cultivate choiceless awareness and discernment. These forms support a continuous process of integration that compounds the educational approach offered in ayurvedic psychology. This brings the practitioner into a state of full awareness, which brings about balance and peace.

In ayurvedic psychology [19] individuals are assisted in developing discernment or vidya through various forms of assessment and feedback, referred to as nidanam [2]. In internal medicine (kaya chikitsa) assessment is differential, meaning before and after treatment. The purpose is to establish a line of treatment. In ayurvedic psychology, assessment is dynamic and thus spans the whole session. The purpose of this is to dynamically mirror what the learner is experiencing subjectively through direct feedback. The forms of assessment employed are pulse and empathic reading, reading the characteristics of the voice, external characteristics and anamnesis (history). Some of these aspects are also part of aforementioned forms of yoga.

This gradually brings individuals to a point where they can spontaneously sink into being consciously aware and discerning as the ground of perception, thinking, feeling, sensing, and any other activity performed. The process of learning (abhyasa) through feedback leads to non-reactivity or vairagya [9]. This is when one is most empathetic with others, learning is most comprehensive and integration ever more effective. The individuals can then integrate and let go of what keeps them away from experiencing wholeness.

Conclusion

Throughout this paper we have laid out the framework, vocabulary and axiomatic formulations that are used as the basis for the educational practice of ayurvedic psychology. This enables access to choiceless awareness and discernment as an inborn capacity. According to the view presented in this paper, being established in choiceless awareness is an intentional and conscious choice. The aim of its educational approach is to cultivate a conscious lifestyle and a change in the way individuals relate to self and to one another socially, creating the conditions for a planetary social awakening. Moreover, it offers the assessment tools to empathically read and give feedback about the actual response-patterns that keep one from feeling whole. While consciously sustaining choiceless awareness and discerning the dynamic quality and features of subjective experience on different levels, integration of the hemispheres of the brain, brain and heart, emotional states, memories of the past and other domains lead to a more fulfilling life-experience.

This research paper will be followed by a study in which we seek validation of our hypothesis. This will explore the effects of ayurvedic psychology on the capacity of individuals to 1) internally navigate; 2) integrate response patterns; 3) regulate self/emotions; and 4) raise their quality of life experience. Psychosocial ratings of distress, ratings correlated with the unlearning of action-reaction patterns, and neurological ratings will be designed to explore the essential mechanisms by which awareness-raising and discernment translate into enduring psychological, physiological and psychosocial outcomes.

Whether we are dealing with learners, professionals, a client, a student, or a team within an organization, by applying this model, any process of human communication and organizational change can be affected from within. This model has been especially meaningful for educational professionals who guide learners from early childhood. By consciously managing attention, through awareness and discernment, individuals as well as groups evolve through different stages that cultivate increasing levels of self-directedness, self-organization and self-regulation. In this process, individual learners may begin recognizing their personal role within the bigger scheme of things, awakening to their innate capacity to be original, creative and authentic.

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Authors Column



Between 1990 and the present Carlo Monsanto contributed to fundamental and theoretical research and development in ayurvedic psychology, an innovative development in Ayurveda. His objective is to help cultivate the awareness, discernment and group-intelligence of individuals to release limiting personal and cultural beliefs, habit patterns and projections, establishing a base for the development of conscious culture. Carlo has also contributed to developing and offering educational programs to create the conditions by which participants can communicate more empathically. Members of groups learn to more effectively access a shared consciousness to empower collaboration. Carlo has successfully applied the ayurvedic psychology framework and practice to educational, healthcare, corporate and social environments. He has founded and has served on the board of various organizations. Currently he is developing different platforms for research and dissemination of ayurvedic psychology as a form of applied consciousness.



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