

Applied Yogic Wisdom: Ancient Science, Contemporary Recovery

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*We cannot know our world until we find a compass that can chart what world we know...*Theodore Spencer

Sutra I.3: *tadā draṣṭuḥ svarūpe 'vasthānam*—Until we see who we are, we cannot understand ourselves.

#universe

## Dedication

For my maverick sons, **Eben and Augustus Britton**—shaman and shapeshifters, the bravest and most loving warriors and out-thinkers I know. Everything I do is for you. And my beautiful granddaughter **Sandy B**—the self-proclaimed witch and her witch mama **Brit** (May 15—inspiration day).

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It is TRIBE that made this happen. The Strong Witch Clan.

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**Abstract:**

This thesis proposes that Yogic philosophy provides a roadmap for recovery from pain, injury and addiction. Four specific concepts from the *R̥g Veda* and specific Yoga Sutras of Patañjali can be viewed conceptually and applied practically as a template for contemporary recovery from any state of discomfort. Recovery here is defined as moving into a state of perceived and embodied balance and ease despite physical circumstance, which then enhances physical circumstance. The Sanskrit terms *asat*, *sat*, *yajña* and *ṛta dhiḥ* will be reimagined and repurposed as a paradigm of moving from the destabilization of injury, medical trauma, addiction, and chronic pain to an experience of wellness. Specific Patañjali Sutras will be proposed as an action plan for recovery, and the *Bhagavad Gita*, Arjuna's journey, will be a reflection of the process from crisis to wholeness. This fluid, theoretical repurposing will be supported by interviews and lectures from key Indian experts--medical doctors, doctors-of-philosophy and neuroscientists who will confirm that the application of these texts shifts perception and experience from disease to ease despite circumstance. I have created two systems: Applied Yogic Science & Treatment and 11<sup>th</sup> Step Yoga, which I will describe; I will then show how the aforementioned texts and concepts bring people to *sukha* (ease) and *sattva* (relative balance).

**Keywords:** Yoga, yogic, recovery, pain, injury, trauma, crisis, addiction, *sukha*, *duhkha*, dharma, imagination, *sattva*, rajas, tamas, guna, meditation, pranyayama, philosophy, yoga, wholeness, rightness, purpose, perception, *asat*, *sat*, *yajna*, *ṛta dhi*, *R̥g Veda*, Patañjali Sutras, *Bhagavad Gita*.

## Introduction:

The recent surge of interest in alternative paradigms of healing to support medical intervention indicates that there is not only a need for deeper integration of these modalities, but that further research is required to elucidate which combinations of yogic text and science might be the most beneficial and for which conditions. This thesis engages yogic esoteric philosophy—recorded in some of the oldest scriptures known to mankind—with modern medical injury, pain and addiction traumas, reimagining and repurposing ancient theory to show how it can be successfully integrated into and applied to contemporary systematic healing methods.

According to the National Institute of Health, chronic pain affects 100 million people in America and is primarily treated by opioids and anti-inflammatory drugs. According to the latest statistics from the National Institute for Drug Addiction, there are 24 million alcoholics and addicts whose primary treatments are behavioral counseling to change habit patterns; mutual support groups such as AA and anti-drinking medications. Unfortunately 12 Step Program has seen an alarming rate over the past ten year of people relapsing as a result of medically prescribed opioids, from pain killers, to muscle relaxants to psycho-actives. It is impossible to aggregate the statistics on injury & medical traumas, but both categories are treated generally with opioids and physical therapy.

In a time when the government has declared a state of emergency due to the opioid epidemic, applied yogic science and treatment is a strong, healthy, applicable alternative. This thesis presents and supports two systems I have created which apply ancient yogic science to enhance contemporary recovery. **WE MUST CHANGE THE CONVERSATION ABOUT PAIN AND DISCOMFORT**—about its purpose in our lives, its treatment and its potential to actually make our lives better, deeper, more open to possibility.

There is an innate wholeness in human beings which is embodied and free. But when the body is in pain, under the lash of mental illness or injured, this wholeness becomes clouded over and lost. Only tightness, darkness, and fear afflict us; in both matter and spirit. Yoga sūtra 1.30 describes these obstacles to wholeness: sickness, dullness, doubt, carelessness, laziness, sense addiction, false view, losing ground, and instability (Christopher Chapple, 118). The *Ṛg Veda* provides a theory that views pain, instability, and fear as a starting point of recovery—the Sanskrit word *asat*, which corresponds with this state of chaos, means lack of truth. The proposal is that we explore the current truth, whether it is uncomfortable—*duḥkha* in Sanskrit—or not, to move forward into our own balance. In his book, *Yoga and the Luminous: Patañjali's Spiritual Path to Freedom*, author Christopher Chapple, PhD, writes, “The Yoga Sūtra of Patañjali, which was most likely composed more than 1,500 years ago...(was) designed to effect a transformation of the individual” (103).

“7,000 years ago, yoga was talking about psychosomatic issues and how to deal with them,” according to Dr. Ananda Balayogi Bhavanani, the director of the International Center for Yoga Education and Research (ICYER) at the Mahatma Gandhi Hospital and University in Puducherry, India. This thesis proposes that the roots of a profound way of promoting health can be found in both the *Ṛg Veda* and Patañjali's *Yoga Sūtras* and that specific principles in yogic philosophy provide a roadmap back to wholeness, no matter what the diagnosis.

Writes Christopher Chapple: “...the Yoga Sūtra provides a mental map for restructuring the influences of past habituations (*samskāras*)” (103). This thesis proposes that the *Yoga Sūtra* also provides a modern day roadmap for healing from injury, pain, and addiction.

In December 2017, during a lecture at the ICYER, Dr. Ananda Balayogi Bhavanani asserted that the difference between the perspective of yogic medicine and Western medicine comes

down to salutogenesis versus pathogenesis. In other words, focus on the solution is the yogic way, focus on the problem is the Western way. Yoga as a platform for wellness doesn't care what the problem is, it cares about how you act and how you think—essentially, what you practice in your LIFE with a capital L.

During my first trip to Puducherry, it was made clear to me that the major point of difference between yogic treatment and a Western medical approach is that the diagnosis is not what is important. All dis-ease in the yogic textual tradition falls under the category of *duḥkha*, or suffering. The goal is to return to *sukha*, or ease. In addition, it was made clear that specific yogic texts, particularly the *Yoga Sūtras* of Patañjali, can be applied as a therapeutic modality to treat pain, addiction and injury OF ANY KIND through surrender, practice, and self-understanding.

The word *sūtra* in Sanskrit has been defined as “thread.” From this, we derive the English word “suture”. The linguistic irony is that the sutras sew back together a mind fragmented by injury, addiction and pain. The *Sūtras* of Patañjali offer up both a description of the afflictions which disorganize human experience, and a creative, compassionate, and non-harming roadmap for reorganization—such a good thing in this time of pharmaceutical interventions run amok. But while *duḥkha* refers to all types of suffering, not all humans are the same. As such, the applications shown here are extremely diverse and the treatments inspired by yogic philosophy are syncretic and fluid.

The first, second and third Patañjali sūtras suggest yogic action and its final resolution. The first two *padas* or chapters of the *Sūtras*, used creatively, are a powerful enhancement to medical interventions, addiction recovery and pain reduction. Additionally, important principles found in the *Ṛg Veda* provide an overarching view of the road from instability to acceptance, action, and



finally recovery. They are a paradigm of knowledge, or *jñāna*, not a practice. However, knowledge and practice must go hand in hand. Philosophy is nothing without practice. Once the two are joined, transformation occurs, and that is where wisdom lives.

The contemporized yogic toolkit offered here aims to change the perception of difficulty, so that recovery can happen. Just as Arjuna, the protagonist of the epic poem, the *Bhagavad Gita*, rose out of despair through the yogic teachings of his charioteer, Krishna, despite the fact that none of his circumstances changed, so too, can anyone who is suffering change their mind, actions, and experience of what is, so that they find wholeness again.

This thesis proposes that certain aspects of the *R̥g Veda* and the Patañjali *Sūtras* can be reimagined and applied to make it easier for patients to get well during intense medical, emotional, and psychologically trying times. Dr. Bhavanani told me recently that yoga enhances modern medical management. It is not meant to cure that which needs medical intervention. It rounds out the experience of the patient so he or she can make balanced and well-informed decisions. How? By using these systems as a practice for changing the way one perceives his/her experience. I have created two systems: Applied Yogic Science & Treatment (AYST) and 11th Step Yoga for Recovery from Addiction & Trauma (11SY). This thesis will show how the paradigm of transformation from destabilization to wholeness or recovery as elucidated in the *R̥g Veda* works when the Sūtras can be repurposed and applied as a form of “salutogenesis.” It will also show how I have integrated this healing arc and practice into these two systems. AYST is a one on one practice done on a massage table and 11SY is practiced in a group setting.

The combinations of the yogic texts and principles will be fluid since treatment requires intentional participation from the patient; as perception and experience of both psychic and physical natures changes, treatment will shift and change. What separates this process from a

standard Western paradigm is that application of yogic science requires a trusting partnership between healer and patient, and an intention from the sufferer to heal--and that takes time. Success is qualitative, not necessarily quantitative.

The inspiration for this thesis and scientific and philosophical support for the systems I have created is a direct result of a Yoga Therapy immersion guided by Professor Lori Fazzio, DPT, and Shanna Hughes, in Puducherry and Lonvala, India. I have used lectures and interviews to support my textual analysis and scientific application theories and practice. The resources from this trip include: The expertise of Dr. Ananda Balayogi Bhavanani, director of the International Center for Yoga Education and Research at the Mahatma Gandhi Hospital and University in Puducherry, India, as well as lectures on Classical Yoga and Yoga Anatomy presented by Dr. Ganesh Rao PhD and Dr. S.D. Bhalekar at the Kaivalyadhama Yoga Research and Science Center in Lonvala.

Specific Sutras from Patañjali will be taken from *Yoga and the Luminous* by Dr. Christopher Chapple, *The Yoga Darshan* by Dr. Ananda Balayogi Bhavanani and *The Heart of Yoga* by T.K.V. Desikachar. Sanskrit support will come from Dr. Urmila Patil and Alexandra Berger, MA Yoga Arts, PhD candidate.

These experts will give close range analysis of the effects of the Patañjali *Sūtras* and *Ṛg Veda* principles on the organization of the brain, pain management, and perception. Medical context and practical theory are both discussed and explored. While this thesis proposes specific texts as a roadmap for healing, it is not meant as a thesis about Yoga Therapy from either an Indian or Western point of view.

This thesis is intended to be viewed as an inspired and applicable systematic possibility for individuals who are interested in the potential of yogic philosophy as a healing science and

viable practice to enhance recovery from pain, injury and addiction. Assessment tools need to be developed other than the obvious experiential successes patients have revealed. While legitimate schools of yoga all make clear that a committed student and loving teacher are critical for the transformation provided by practicing yogic philosophy—working with people who are in a state of catastrophe as a result of the trauma of pain, injury and addiction is a different situation. The vulnerability of a person who is suffering from extreme medical conditions makes them open to this work and allows them to connect with it, yet it also requires a skilled and committed practitioner, not a beginner teacher. Since these are systems I developed, it is not recommended as a practice by anyone else, until future trainings can occur. Happily, I've seen even the most skeptical of patients receive the benefits of AYS&T and 11SY. This work helps to shift perception, behavior, and lifestyle to take a patient from *duḥkha* to *sukha*, from illness to wellness. After the initial period of treatment, however, it is the patient's job to sustain this newfound wellness through further practice.

The systems can be applied to:

### **AYST for Ongoing Pain and Autoimmune Conditions**

The application of yogic science, particularly the *niyamas*, *āsana*, *prāṇāyāma*, manual manipulation of the body into asana, and visualization to chronic pain.

Chronic pain and autoimmune affects 100 million people in America and is a highly complex, individual situation only part of which is the continuous firing of pain signals. It is primarily treated with opioids and anti-inflammatory drugs.

I present a case study of a 62-year-old highly successful woman who lives in chronic, site specific pain due to multiple pelvic surgeries, cancer and reconstruction of her right foot. Education on yogic theory and practice of aspects of the *Sūtras* are utilized. This is a fluid

application of all 8 limbs of yoga. This very same creative application is also used for extreme and professional athletes who have had injuries and surgeries.

### **AYST for Injury & Medical Traumas**

It is impossible to aggregate the statistics on this, but both these categories are treated generally with opioids and physical therapy.

AYST is extremely effective for reintegrating the body/being and brain after surgery or sports injuries. No matter how well one gets, or how beneficial surgery is, it is still a trauma, which is often retained in various alignment anomalies. **The application of yogic science and theory from the Sādhana and Samādhi Pādas of the Patañjali Sūtras is extremely effective as a treatment, including manual manipulation and a handful of thereapeutic yoga postures and pranayama.**

The Sādhana Pāda and its description of the afflictions and the 8 limbs of yoga from the Samādhi Pāda in the *Yoga Sūtras* can be applied to an athlete's traumatic injury and its aftereffects for a profound change in perception and physical circumstance, so for example good decisions can be made about returning to competition. For athletes who need to get back in the professional game, AYS&T reduces anxiety and panic over losing their position and actually speeds up real recovery in a way pain killers alone will not.

### **11SY for Alcoholism and Addiction and Trauma Recovery**

The application of the Sutras combined with the 12 Steps of Recovery and the education of shift in perception as found in the *Bhagavad Gita* and the *R̥g Veda*. All 8 limbs of Patañjali's yoga are applied.

Alcoholism & addiction affect 24 million Americans (National Institute for Drug Addiction). The primary treatments are behavioral counseling to change habit patterns; mutual support groups such as AA; anti-drinking medications.

This case study follows the combined usage of yogic theory and practice with the 12 Steps of Recovery as applied in 11SY, a group addiction recovery meeting that has been ongoing for 12 years.

### **Methodology**

Since my thesis proposes that the roots of recovery are found in specific conceptual constructs of the *R̥g Veda*, I will begin with definitions of what I view as a valid ancient paradigm of recovery found in the principles of *asat*, *sat*, *yajña* and *ṛta dhiḥ*. These will be explored in the context of Antonio T. de Nicholas's *Meditations through the R̥g Veda*, and William K. Mahoney's, *The Artful Universe*. This will support my theory that these principles offer a paradigmatic arch of recovery. While these principles were received in ancient times as comforting concepts for the vagaries of the natural world in extremis in India, I am reimagining them from a macrocosmic perspective of nature, earth, gods and goddesses, to a microcosmic perspective of human development and growth. For the purpose of this thesis I am viewing the Sanskrit language as a living entity which can be re-imagined in real time.

Defining recovery from a yogic perspective as a moving and mutable experience which follows a path from instability to purpose, shifts perception and creates transformation, is at the epicenter of this thesis. I will view the *Bhagavad Gita* (translations will include Lauri Patton's and Winthrop Sargeant's) as a metaphoric recovery text which proposes that the protagonist, Arjuna, moves from despair to equanimity by changing his practice and perception at the behest of Lord Krishna. Additional sources which view recovery as a mutable, mystical practice, such

as the *Twelve by Twelve* and *The Big Book* of Alcoholics Anonymous, and William James's *Varieties of Religious Experience* will provide perspectives of recovery as an ongoing, life specific practice and change in perception.

Research and lectures from Indian experts on Yoga philosophy and neuroscience will explain why injury, chronic pain and addiction can all be viewed and treated as a condition which comes from a brain disorganized by dis-ease or pain. Lectures and interviews from my recent Yoga Therapy trip to Kaivalyadhama Yoga Research and Science Center in Lonvala, and The International Center for Yoga Education and Research, in Puducherry, India, will support this section.

I will view the concept of *yajña* from the *R̥g Veda*, as a sustainable “practice” or right action, and the *Yoga Sūtras* of Patañjali, will be explored as a manual for understanding, activating, and harnessing an experience of wholeness. Specifically selected sutras will show the root of dis-ease and its locus in the brain/mind, as well as the road map to wholeness. Opinions by experts in this text, Dr. Ananda Balayogi Bhavanani, Dr. Ganesh Rao and Dr. S.D. Bhalekar at the Kaivalyadhama Yoga Research and Science Center in Lonvala, will support the use of the 8 limbs of yoga as a practicable vehicle for perception changes and embodied wholeness and purpose, to help ameliorate suffering.

The yogic philosophy presented here moves from obstacles to solutions. Between those two states are a host of what modern science calls impairment of the neuroendocrine system, sympathetic activation, and suppression of the parasympathetic nervous system. There is also an increase in the levels cortisol, which has adverse effects on different systems. Studies show that the long-term effects of current trauma in a person's life—which can include injury, addiction, and chronic pain—are generalized hyper-arousal with difficulty moderating it, fear, and a loss of

trust and hope (Telles, Shirley. *Managing Mental Health Disorders Resulting from Trauma, Through Yoga: A Review*. Hindawi Publishing, Haridwar, India. Vol. 2012).

All of this leads to cascading events, behaviors, and thoughts which change one's life experience. Predominant current treatments for these behaviors and crushing life circumstances are: pharmaceuticals, psychotherapy, physical therapy and mutual support groups. These are quick, easy, familiar, short-term solutions for traumatic problems--VERY useful in the moment to take one out of crisis and to facilitate the possibility of creating lifestyle changes. However, they do not accomplish what the practice of yogic philosophy and science does, namely, change one's perception of the self so that experience changes over the LONG HAUL, allowing medical intervention to be both useful and temporary.

Exclusive interviews and lectures with a body of experts will support how a fluid application of the active principles suggested by this thesis as a treatment paradigm actually work on a functional level. And this supports the systems I have created: AYST and 11SY. Through expert testimony, a clear and cogent parallel in the arc of recovery as portrayed in the paradigm of *asat*, *sat*, *yajña*, and *ṛta dhiḥ* and in modern paradigms will be served up to apply to the healing of crisis and trauma. This will show how the earliest principles made no separation between the religious practices of finding wholeness with the absolute and finding personal wholeness.

My methodology will include a recent lecture given by Dr. Bhavanai at the International Center for Yoga Therapy Education and Research in Puducherry, India, where he suggested that a shift from *I to We* (and I-llness to We-llness) is an important aspect of recovery, and how trauma affects the nervous system and the brain and makes us feel separated from self and others. According to experts, the development of a self-healing application of yogic science and

philosophy and a cultivation of positive imagining is a key aspect of returning to a state of recovery and wholeness—going from a disorganized brain/mind to an organized one (or from a psychological state of *asat* to one of *ṛta dhiḥ*). Dr. Bhavanani proposes that the *Yoga Sūtras* move us from illness to wellness.

I will use data from interviews and lectures from medical doctors, PhDs, and Neuroscience experts to support my proposal for a yogic roadmap to recovery. This data will serve the purpose of explaining and supporting the effectiveness of the suggested actions found in the *Yoga Sūtras* on brain structure and chemistry and of showing why *yajña*—action or ritual conducted with community/teacher/healer—is so transformative. These interviews will display how pain, injury, and addiction affect the brain (nervous system), disorganize thinking, and skew perception, resulting in dis-ease and discomfort, or *duḥkha*. The interviews with these medical and doctoral experts will also show how the brain becomes reorganized by activating and embodying the *Yoga Sūtras* so one returns to wholeness and right perception through positive usage of the mind/brain.

#### Chapter I: Pain, Practice, Transformation

In the epic story of the *Bhagavad Gita*, Arjuna, the protagonist, cries out to the universe for help. He is in total despair. He is a great warrior in his chariot on the battle field, poised on the verge of an epic war against his kinsmen. In a moment of pitiful and incomprehensible demoralization, he questions who he is, his *dharma* (duty determined by birth) and all that is. He is unwilling to step into battle one more time and harm his family. This epic battle brings two sides of his family onto the battle field for the sake of keeping a kind of local world order, and Arjuna cannot tolerate the idea of killing his cousins, friends, and all his kin. And yet, this is his destiny. Time stops, and Lord Krishna, having taken the form of Arjuna's charioteer, uses Arjuna's personal crisis and surrender as an opportunity to deliver the message of the yogic



wisdom of action with detachment so that Arjuna can move forward in his *dharma*. Arjuna is in a state of chaos, darkness, or *asat* in Sanskrit.

It is a critical moment, for if Arjuna is not able to act on Krishna's teachings, he is certain to repeat his painful karma, and the kingdom over which it is his duty to provide care is doomed. Arjuna must live in his truth in order that he may move forward. Krishna tells Arjuna he must accept his identity as a great warrior, and as a member of the *ksatriya* class, and that it is his responsibility to act in that truth. Acceptance of truth, truth itself, this is *sat* in Sanskrit.

Krishna, the best healer possible because he is the voice of dharma which means return to wholeness, lays out the plan of action to help Arjuna return to his dharma. The ensuing Song of God, as the *Gita* is known, is a literary endeavor which serves up an integration and elucidation of many systems of Yoga, from classical to orthodox, which allow Arjuna to move through his conflict with grace and awareness. Action and practice here are a kind of personal *yajña*. These practices will return Arjuna to his wholeness and truth, and to his *dharmic* mission. In the bones of the *Gita* are the principles of chaos and destabilization, acceptance and truth, action and practice, recovery and purpose.

In hospitals, physical therapy offices, church basements, and sober livings all over the world, hundreds of thousands of people suffering from injury, addiction and chronic pain face the same dilemma as Arjuna. Life has become a battle ground of destabilization and pain behaviors. Crisis has created a host of body/mind problems—*duhkha* or dis-ease. The battle with diagnosis has become primary. Sufferers are both in the dark and hopeless. This suffering is the result of the primacy of diagnosis. In other words the focus is on the problem, not the solution. The really good news is that the foundation of 12 Step program, just as the foundational message

of the Gita is that of focusing on solution as opposed to wrestling with the problem. And the first step to solution is to admit there is a problem and then move forward in blind faith.

There are axioms of transformation which appear to hold true across time, no matter what the problem: Chaos and confusion; uncertainty about what questions to ask; a call for help; the appearance of someone who can and will help; acceptance and surrender to circumstances; a possible roadmap; knowledge of self and circumstances; practice of solutions. Acceptance, Practice, Action—these are the stumbling steps on the route out of hell. Here I define the word hell in the ancient Aramaic way, as “crazy thinking,” similar to the yogic concept of “whirlpools of the subconscious” (Bhavanani, *Understanding the Yoga Darshan* 32). Bhavanani describes the *vṛtti*'s in *Sūtra 1.2* as the “whirlpools of the subconscious.”

The Hymn of Creation, *Ṛg Veda* 10.129, speaks of a process that moves from confusion to understanding and flourishing, a parallel to what we see throughout the *Bhagavad Gita*. It is a process that includes (in Sanskrit): *asat, sat, yajña, ṛta dhiḥ* (Mahony, 12). In English, these are, respectively, chaos and confusion, truth, ritual action, and wholeness and purpose. Each phase connects to the next.

The theory of this thesis is that there is a conceptual paradigm for wellness found in the trajectory outlined in the Gita and in the *Rg Vedic* principles of *asat, sat, yajña* and *ṛta dhiḥ*. Both scholar/authors who specialize in the *Ṛg Veda*, Antonio T. de Nicolás in his book, *Meditations through the Ṛg Veda* and William K. Mahony in his book, *The Artful Universe*, define these principles to varying degrees as darkness and lack of knowledge, truth and active acceptance, community action, and a sustainable oneness, rhythm or purpose. Based on the Gita and the work of these two authors, this thesis has re-imagined them as the key points of a universal paradigmatic arch of healing. It is a soothing proposition for patients to understand that

there is a process to healing that has to include all these steps: It gives them hope. Hope is critical for practicing the work ahead, in this case, from the *Yoga Sūtras* of Patañjali.

The epicenter of this arc from destabilization to recovery is *yajña*. In Vedic times (1700-500 BCE) the need to cope with the totality of raw nature inspired the creation of *yajña*, or community rituals. *Yajña*, writes Mahony, lies at the very core of the Vedic world view (108). He adds, however, that though Vedic religion revolved around the powers of nature and the personalities of the gods and goddesses to enliven a chaotic natural world, that this same structure and function could be harnessed for the individual human being (Mahony 1). Most importantly he proposes that the sacred power of the imagination restores life:

*In Vedic times the sacred imagination serves a similar function. In refreshing the debilitated power of life, in healing the fractured harmony of being, in recognizing the presence of the divine in the world and within one's own being the imagination relinks this, the artful universe. (Mahony 16)*

It is this proposal of the action of the imagination and its results that theoretically updates the concept of *yajña* as it is practiced via specific *Yoga Sūtras* for transformation from chaos to recovery.

As Christopher Chapple, Phd., says in his book *Yoga and the Luminous*, “the healing power of the Sutras is driven by an increasing subtilization of the practitioner [patient, in the case of this thesis]...which brings her to a state of wholesome discernment and reperspectiving of given circumstances” (Chapple 5). As such, practice (*yajña*) of these principles in an ongoing way provides a sustained experience of wholeness or recovery.

For the purpose of this thesis the fluid definition of recovery is wholeness, at “oneness,” right purpose, and even yoga. I use the word fluid, because as we evolve in practice our

definition and perception of ourselves in the world changes, our concept of the absolute changes, and those two aspects, represented in classical yoga philosophy by *puruṣa* (consciousness) and *prakṛti* (matter), are always intertwined.

In the theory and application systems I present here, transformation from dis-ease to ease requires: 1. Destabilization: opening up to the root of the problem, a disorganized thought process, and vulnerability (*asat*). 2. Acceptance of the truth and awareness of the state of disease without trying to fix it, but hopeful of getting well (*sat*). 3. Practicing the 8 limbs of yoga so one can discern the type of pain—current, remembered, imagined (*yajñā*). 4. Sustaining the rhythm of recovery by perceiving oneself properly and continuing a relationship with a divine power, or simply a sense of one-ness with the world; redefinition of recovery as being able to fully cope with *what is* in a joyous way, and then giving back to others through your own truth (*rta dhiḥ*).

The concepts of *īśvarapraṇidhāna* (surrender), *tapas* (practice) and *svādhyāya* (self-understanding), according to T. K.V. Desikachar in *The Heart of Yoga*, are critical to recovery of right perception and return to purpose (145).

It is extremely important to note that recovery is a body/mind experience, and *that* is the yogic idea. Shrikrishna, PhD. author of *Notes on Structure and Functions of the Human Body and Effects of Yogic Practices on It*, says:

It is essential to note here, that from the Yogic point of view the body and mind is never considered as made up of two separate entities. They are rather looked upon as one single composite unit. Similarly, the structure of the human body and its function also, were never considered as two separate things but were rather treated as the two aspects of the same organism. (3)

The *Yoga Sūtras* of Patañjali are explicit in that the focus of the work is on the mind, also called *citta*, or consciousness. This is both a simple and complex object and subject. The first sūtra: *atha yogānuśāsanam*, according to Dr. Bhavanani, can be translated as: *We now commence the discipline of re-integration (Understanding the Yoga Darshan 32)*. This implies both psychophysiological integration, and integration back to union with the absolute, he says.

The final sūtra, IV. 34: “The return of the origin of the *guṇas*, emptied of their purpose for *puruṣa*, is *kaivalyam*, the steadfastness in its own form, and the power of higher consciousness” (Chapple 138), implies an embodied state. About this final sutra, Dr. Bhavanani says: “We come back to sat-chit-anandam (absolute reality, consciousness and bliss)” in our psychophysiological vehicle (*Understanding the Yoga Darshan 374*).

And so, recovery in this thesis always implies wholeness of both matter and spirit. However, particular AYST and 11SY concepts can target one or the other or both. As Desikachar very clearly advises his students in his book, *The Heart of Yoga: Start where you are* (32).

## Chapter II: Recovery Defined

What is recovery? The word recovery is creatively derived of the Latin roots: Re=to return, co=with, veritas=truth. In fact, recovery is an active state of emotional, physical, and spiritual awareness--it is regenerative, as Swami Kuvalyananda, founder of Kaivalyadhama in 1924, said of Yoga. It is about being whole, finding a moveable stance of steadiness and ease (Sutra II.46: *sthira sukham āsanam*) and wearing life’s circumstance like a loose garment—being capable of focusing on emotional well-being while in a dis-eased state. Healthy decisions can’t be made unless you are in steadiness and ease. Recovery is an action toward balance, and

yoga, quite literally, is an action toward balance, reintegration, and organized thinking. This is made quite clear in the *Yoga Sūtras* of Patañjali. In his book, Dr. Chapple writes:

Procedurally and ultimately Yoga takes an array of approaches...and several descriptions of the goal once it has been achieved...[yet] there is one matter in Yoga about which there is no choice: the necessity for the practitioner to recall the *guṇas* back to a condition of equilibrium (*pratiprasava*) mentioned in II:10 and IV: 34. Yoga empowers one to regulate and pacify the drama of the ever changing *guṇas*. Lethargy (*tamas*), passionate activity (*rajas*) and lightness (*sattva*) comprise the *guṇas*. (105)

It is in the body, or *prakṛti*, where equilibrium must be found no matter where and what the *duḥkha* is. Yoga and classical Sāṃkhya agree that consciousness changes as our awareness of the body and the *guṇas*' effect on it changes. "Like Sāṃkhya, Yoga unequivocally asserts the reality of *prakṛti*. Like Sāṃkhya, Yoga extols discriminative knowledge as the means to liberation..." (Chapple105). It is the discipline of yoga practices which helps us to lessen the attachments to the physical world, to get more and more discerning about our real situation, and bring us to the highest awareness: *cit śakti*—embodied consciousness in a *sattvic* state.

Pain, addiction, and injury disorganize the brain, according to Dr. S.D. Bhalekar (December 2017, Kaivalyadhama). Brain science, he says, has proven the positive effects of the 8 limbs of yoga on neuroplasticity. In a December 2017 lecture on Anatomy and Physiology at the Kaivalyadhama Yoga Education and Research Center in Lonvala, India, he said: If the brain is disorganized, all systems go off. In support of this statement, studies show that yoga affects neuroplasticity—the ability of the brain to reorganize itself—and creates synchrony in the brain centers.

Some findings provided by Professor Lori Fazzio, and Dr. S.D. Bhalekar include:

- Yoga modifies the stress response through breathing and awareness, so habitual behaviors can be modified.
- Yoga changes how pain is processed in the brain. Meditation reduces pain signals.
- Yoga reduces depression which atrophies the thalamus, amygdala and the hippocampus. It helps to regrow those areas of the brain.
- The thalamus processes pain differently when in meditation.
- Yoga makes the insula thicker. It processes empathy, consciousness, intensity of pain, visceral awareness. Pain is decreased.
- Prefrontal Cortex is thicker in meditators—decisions become more rational; emotional responses are modulated.

It is the disorganized brain, says Dr. Bhalekar, which creates ill health, that is the root cause. Pain, injury, and addiction disturb the hypothalamus and the amygdala. The former controls the sympathetic and parasympathetic nervous systems; the latter controls worry, fear, memory and pain.

“The hypothalamus governs all the systems in the body that are emotional: Chronic disorders come from here. The problems may all be different, but the solutions are the same,” says Dr. Bhalekar (Kaivalyadhama, Lecture on Yoga and Anatomy & Physiology, 2017). The pre-frontal cortex has the authority to control the emotional center and it gets stronger and thicker as a result of the meditation in yoga practice. The discipline of yogic practice, the 8 limbs as outlined in the Patañjali *Sūtras*, grow the work of the cortical center, so it is not run by the limbic system.

A simple āsana (postural) practice which combines *prāṇāyāma* (breath control) and meditation creates synchrony in the brain centers. It creates a conditioning in the brain, sending a

signal to the limbic system to calm down. The 8 limbs as outlined by Patañjali, practiced for at least 21 days, says Dr. Bhalekar, help to retrain the over-active limbic or reactionary brain, reducing cognitive distortions which say that the wrong thing is right.

Lori Fazio, DPT notes: *Pain science is much more complicated than JUST brain changes. Pain is a complex process involving several systems and we actually recognize that there is more we don't know about pain than there is what we do know. As time evolves what we "knew" we now "know" is not the full story thus what we "know" now is likely not the full story either.* (Loyola Marymount University. One on one interview: 2016).

Chronic stress creates dis-ease and is a result of dis-ease. It is a catch-22. It has been my observation that people who have been destabilized by the trauma of medical or other injuries, ongoing pain, and addiction have three types of pain:

1. Current: Which is very real and is the result of a real time incident.
2. Remembered: Which is a memory of pain that smudges into the current field of sensation.
3. Imagined: Fear of pain that is not there.

The disorganized brain cannot discern the difference between these three types of pain. The Application of Yogic Philosophy via the *Sūtras* helps with the clarity needed to take action to reduce any of these conditions and reorganize the brain. *Viveka*, or discernment of what is true, what needs to be practiced, and how to sustain practice is what is needed and that is found in the *Sūtras*.

So, for the purpose of this thesis, recovery will be defined as yoga and the related activities which create an evolving state of reintegration so that perception becomes positive. In his book, *Understanding the Yoga Darshan; An Exploration of the Yoga Sutra of Maharishi*



*Patañjali*, Dr. Bhavanani translates the first of the *Sūtras* this way: “*Atha Yogānuśāsanam*: We now commence the discipline of re-integration” (31). It is ignorance (*avidyā*), that explodes individuals into infinite pieces, and yoga, which creates *viveka* (right understanding, or discernment) is the only process of reintegration as well as the final goal of re-union with the essence. (Bhavanani 31).

Dr. Bhavanani tells the story of his father, Yoga Maharishi Dr. Swami Gitananda Giri Guru Maharaj, a guru and medical doctor who once sent a friend to study with his guru. The friend wrote to Swami and said: “Your Guru has blown me into pieces. What should I do now?” Swamiji replied: “Pick up the pieces you wish to keep and put yourself back together again” (Bhavanani 32). This is the process of Yoga. We pick up the important pieces and put ourselves back together, once again.

In this same book: *Understanding Yoga Darshan*, Dr. Bhavanani defines yoga as “the cessation of the whirlpools of the subconscious mind,” a translation of sūtra 1.2 (*yogas cittavṛttinirodhaḥ*) (33). My proposal for the purpose of this thesis is that the “whirlpools of the subconscious mind” refer to remembered and imagined forms of *duḥkha* which come from a pressurized brain area, the amygdala. Dr. Bhavanani writes that the subconscious mind is like a volcano on the verge of eruption. Awareness as it is developed in yoga practice, by bringing the subconscious activities to the light on the conscious level, helps a patient begin to understand their discomfort and learn how to reduce it. Dr. Bhavanani says that one must not cover up the symptoms of the conscious mind, but instead unveil them, understand them, and then let them go. No experience goes unregistered in *citta*, says Bhavanani. It is there, and yoga is meant to uncover it (Bhavanani, 33).

In cases of ongoing pain and injury, the benefits of applying yoga cannot be underestimated in reducing the condition on all its levels. In 12 Step programs for recovery from alcoholism and addiction, there is a saying: “discover, disclose, discard.” This is a concept which directly mirrors the work of the *Sūtras*.

Sutra 1.3 (*tadā draṣṭuḥ svarūpe 'vasthānam*) says that when the whirlpools of the subconscious cease, the ability to perceive things correctly, without fear, worry and misapprehension is present. This too is recovery: the ability to perceive things as they are and move through life accordingly.

### Chapter III: *Asat/Duhkha*

*A-sat*. Without truth. Without truth there is chaos. We are overwhelmed. Life has exceeded what we are capable of understanding or handling. This is a deep state of stress.

The result of pain, addiction, and injury is destabilization. This destabilization then results in fear and stress, and the mind’s activities become chaotic. *Asat* is a destabilized state. In his book, *Karma and Creativity*, author Christopher Chapple, PhD., writes:

The Ṛg Veda is saturated with crisis and strife; ...Antonio deNicolás has developed an interpretation of Vedic literature that sees strife as an integral force in the shaping of this ordinary world view...For the Vedic sage, there is no ultimate experience, only the surrender of perspective to allow for the emergence of new experience. (11)

There is a state of woundedness, when one is ready to surrender to any help available. A wounded being in a state of *asat*, is ready for personal surrender, open to getting well.

Employing the *Sūtras* helps us move the concept from the Vedic macrocosmic perspective, to a microcosmic, personal one.

Sutra 1.5 (*vṛttayaḥ pañcatayyaḥ kliṣṭākliṣṭāḥ*) tells us, “There are five activities of the mind. Each of them can be beneficial and each can cause problems” (Desikachar, 150).

Desikachar comments that Patañjali defines the mind as the activities that occupy it and that these activities (*kleśa*) can be both good or bad (150). In the destabilization that occurs with trauma, they are definitively bad. Without yoga, a post-trauma mind cannot follow direction or comprehend life experience.

Pain, injury, and addiction disorganize the mind, AND, they prey on the mind—becoming its activity, and obsession. Sūtras I.6 through I.11 define the five activities of the mind as comprehension, misapprehension, imagination, deep sleep and memory. The activities we are most interested in for the purpose of this thesis are comprehension, imagination and memory. Comprehension is a function of the pre-frontal cortex, which governs reasoning and imagination, while fear and memory are controlled by the amygdala, and both areas of the brain are affected strongly by the practice of yoga. In their paper, “Yoga and the Ability to Counteract Negative Effects of Stress and Trauma,” Allison R. Steinwand and Staci L. Born, write:

Higher levels of psychological stress have been positively correlated with negative physical consequences including: higher cortisol levels, weakened immune systems, greater susceptibility to infectious disease, increased inflammation, slower healing of injuries and elevated indications of biological aging. Additionally, high stress levels have been correlated with diseases, including: upper respiratory infections, autoimmune diseases. (2)

The brain is entirely disorganized by this state of chaos and unable to function. The brain science of *asat* looks like this, according to Born and Steinwand:

Exposure to stress impairs the prefrontal cortex (PFC), the part of the brain imperative for executive functioning, which includes the ability to regulate attention, perform goal-directed activities, expend cognitive flexibility, and to be aware of and have insight into one's own and others' actions. High stress levels impair the PFC, preventing proper executive functioning, and triggering response from the amygdala and other areas involved with emotional reaction (Arnsten et al., 2015). The result is that an individual is unable to think clearly or operate at full cognitive capacity and is more likely to be overcome with intense emotional responses. (5)

Good decisions cannot be made when the amygdala is running the show. Yoga brings us back to the reasoning aspect of the brain, the PFC. When intense emotions are in charge, pain behaviors develop and set a person up for a host of additional problems, according to Michael K. Nicholas. In his paper, "Pain Medicine: A multidisciplinary approach," Michael K. Nicholas talks about "pain behaviors." These are ways of being that are unconsciously born directly out of the chaos wreaked by pain, injury, addiction. Nicholas describes this behavior pattern:

Pain behaviors: clinical implications of the biopsychosocial model of pain [are] that to adequately assess a patient's pain complaint the clinician(s) must address not only the possible physiological basis of the patient's symptoms, but also the range of possible psychological and social/environmental variables that have been found to influence pain, distress and disability. These variables, in turn, may then be targeted by appropriate interventions. Like all behaviors, pain behaviors are likely to be influenced by both internal (physiological and cognitive) factors and environmental (social and physical) factors.

...Evidence for the psychological modulation of pain experience and its impact on the individual is now well established. Key constructs that have been found to be particularly important in this regard are catastrophizing (or excessively negative appraisals of pain and other noxious events, such as injury) [53], fear-avoidance beliefs and behaviors [60] and self-efficacy beliefs (the degree of confidence in one's ability to function or achieve goals despite pain) [49].

Again, this definition of pain behaviors describes a mind that is responding to its activities related to pain, injury, addiction.

Patañjali's *Yoga Sūtra* 1:30 *vyādhi-styāna-saṁśaya-pramādālasāvīrati-bhrānti-darśanālabdha-bhūmikavānavasthitatvāni citta vikṣepāste 'ntarāyāḥ*, describes *asat*:

There are nine types of interruptions to developing mental clarity; illness, mental stagnation, doubts, lack of foresight, fatigue, overindulgence, illusions about one's true state of mind, lack of perseverance, and regression. They are obstacles because they create mental disturbances and encourage distractions. (Desikachar 158)

Mental clarity is key to wellness and recovery. However, these obstacles lead to negative thoughts, pain in the body, grasping for something—anything to help. All of these are part of pain behaviors and all are symptoms of addiction illness, injury, and pain. In other words, they lead to destabilization.

In a recent lecture in Puducherry, India at the CYTER Center inside the Ananda Ashram, Dr. Bhavanani said: "Ignorance, *avidya*, is the root cause of the mis-union between *prakṛti* and *puruṣa* [matter and consciousness]. If we can dissolve our ignorance, our false sense of bondage with the circumstances or objects of the universe will disappear."

He is referring to de-indentifying with our own pain. That union with the pain is what keeps us in profound *asat/duḥkha*. In the above statement, Dr. Bhavanani refers to Patanjali's Sutra II:17 *draṣṭṛdr̥śyayoḥ samyogo heyahhetuḥ*: "Suffering is caused by mis-union between the observer and the observed. This is the ignorance, or *avidhya* that is the mechanism of pain behaviors" (*Understanding the Yoga Darshan* 135).

The human mind has six enemies: lust, anger, greed, attachment, pride, and jealousy, according to Dr. Ganesh Rao during a recent lecture at Kaivalyadhama Ashram in Lonvala, India. These enemies affect the endocrine glands and they secrete the wrong hormones, create acidity and hydrochloric acid. He says, "Trauma is trauma whether it is current or in the past. What the brain doesn't know—something is wrong, doesn't matter what, it's all trauma. The human mind habitually goes to the past or the future."

The experience of destabilization is a moment which provides a person with pain, addiction, and injury an opportunity to be fully committed to getting help. In fact, the first step in recovery from addiction is: "We admitted we were powerless over alcohol, and our lives had become unmanageable." Powerlessness is the doorway through which we walk to create a new way of perceiving and living life.

The great yogic scholar and teacher Krishnamacharya used to say, "Thank God for *Duḥkha*, which he described as an "unavoidable motive for practice" (Desikachar 146). It is part of our reality, and if recognized, serves to wake us up to further clarity and understanding. And that clarity and understanding is *sat*, truth.

#### Chapter IV: *Sat*/Acceptance & Awareness

The word *sat* is defined as truth. This comes readily when we are in such a desperate state of destabilization that we have no choice but to accept exactly what is going on.

Sutra I.3 (*tadā draṣṭuḥ svarupe 'vasthānam*) states, “Until we see who we are, we cannot understand ourselves” (Bhavanani 35). This is the definition of *SAT*, seeing ourselves in a state of truth. This is an opening doorway to recovery.

According to Dr. S.D. Bhalekar, the Patañjali *Sūtras* have this trajectory: change your mind, change your perception, change your experience. Health begins in the mind, he says. How I see myself and treat myself changes me, and is up to me. The mind itself is the problem, says Dr. Bhalekar. Part of getting to the truth of oneself and one’s afflictions is having to surrender enough to actually feel what is going on in the body, despite terrors born of hopelessness and helplessness. Born and Steinwand have concluded that “interoception” is a vital part of restoring homeostasis in the body/being. An overreaction to threat makes it difficult to discern how to regulate the body and perception. Yoga and its emphasis on being in *what is*, can help to create balance. They write:

*While trauma experiences result in neurological changes that impact an individual’s ability to connect with their body (Haase et al., 2016), researchers have found yoga to be beneficial for increasing activation in these areas of the brain important for interoception (Emerson, 2015). Interoception is a person’s ability to connect with and have awareness of different parts of their own body (Emerson, 2015). These findings support the hypothesis that the mindfulness aspects of yoga including practicing interoception, may help to counteract the negative impact of stress on these portions of the brain by strengthening one’s ability to be interoceptive.*

*Sat*, the truth about one’s condition, is a brave place to be, says Dr. Bhavanani, and it breaks the delusional fear that is part of *asat*. He refers to sūtra II.25: “Dissolution of ignorance

breaks this union and enables emancipation.” He writes, “When reality dawns on our inner vision, it may not be a pleasant experience at all. In fact, it is often downright depressing. Yet one must come face to face with reality, if one is to do one’s dharma. That dharma is purely and simply: “attain Kaivalya or freedom” (*Understanding the Yoga Darshan* 147). *Sat* is defined as truth or reality and cannot be denied. Even *duḥkha* is *sat* and is not something to react against, but to be accepted and held in awareness.

Sutra II.23 says we can only manifest our strengths fully if we have truly understood and dealt with our inherent weaknesses. And this is *sat*. It is the beginning of the yogic change in perception. Steinwand and Born write: *Yoga is also helpful in allowing an individual to practice “positive reappraisal” which is a strategy for reframing one’s perception of stressful stimuli (Gard et al., 2014, p. 8). An example of positive reappraisal is when holding a challenging posture in yoga. As students feel their legs shaking from the burden on the muscles, they may be reminded how the legs are being strengthened. They might also be encouraged to breathe or work through the discomfort because it is temporary (Gard et al., 2014). The practice of positive reappraisal is helpful in hindering negative thought patterns that often develop as a result of stress or trauma.*

In a lecture on Yogic philosophy (2017, Kaivalyadhama, Lonvala, India), specifically regarding the *Yoga Sūtras*, Dr. Ganesh Rao said that only human beings can change our conditioning through awareness. Consciousness is conscious of itself. This is distinctly human. This is how we come out of chaos. Referring to sūtra I.3, he states that no experience is unregistered in the *citta*, which is why we cannot become well until we know ourselves.

Recent research on the role of acceptance of persisting pain has also suggested that this can play an important part in a person’s adaptation to their pain. In his paper, Nicholas says:



The ways in which people with persisting pain try to cope with their pain have also been found to make an important contribution to their degree of adjustment. In particular, coping styles (or strategies) deemed to be passive (e.g. excessive resting, relying excessively on medication or other agents and/or other people) have repeatedly been found to be associated with poorer adjustment relative to the use of more active strategies (where the person tries to remain in control as much as possible, as well as keeping active using self- management strategies like activity pacing, goal setting and exercises) [10].

Dr. Bhavanani (ICYER lecture, 2017 )agrees, “Many people do not want to get better because they identify with the disease. You cannot let go for someone.” He says that yoga is a reunion with self-recovery (*duḥkha samyoga viyoga*) and that an important aspect of yoga is to be self-sufficient in any situation (*nitya tripta*). “Be aware that you don’t claim ownership of your disease. Don’t say: My diabetes. Don’t take ownership of it. Stay out of the way of *duḥkha*. Have the appropriate attitude for the appropriate situation. Often patients are so focused on a chant of pain that the pain just stays.”

Dr. Bhavanani says it is important to be aware as to whether a situation is a state (short term) or a trait (long term). Since pain, he says, is about perception and response, “You want to get into your prefrontal cortex. You practice *prāṇāyāma* in order to breathe and alter your reaction. You want to override your reactions system and change your pain threshold, but not become numb to it.” In other words, be in reality (*sat*), not in crazy (*asat*). Dr. Bhavanani continues: “If you change your thoughts and responses you change your pain. From disposition to action is where freedom lies. Awareness is the cornerstone of action because it creates response. Which is why you need both the body and mind—the *Puruṣa*, which is consciousness and the *Prakṛti*, which is the physical body.”

Every action decides your destiny. And this action begins with *yajña*—here defined as practice.

### Chapter V: *Yajña/Abhyāsa/Practice*

*Yajña*, in Vedic times, was a highly choreographed sacrificial, community ritual to compel the gods and goddesses, who were thought to control the vicissitudes of nature, for their mercy and abundance. *Yajña* in many respects is the microcosmic essence of the *Yoga Sūtras* of Patañjali because these sūtras require application and practice to compel the divine within to come into contact with itself in a state of luminosity and clarity that is yoga. (Mahony tk).

*Yajña*, or taking action in ritual, word, imagination and creation, is intimately linked to the performance of sacrifice, or personal, intentional practice. Through the vital impulse of ritual action, the performer gains access to creative power, according to Mahony (12). This is the essence of Yoga. “The application of yogic practices causes a progressive subtilization of one’s focus, which is directed away from the gross manifestations of *citta-vṛtti* to the most sublime aspect of *prakṛti*, the state of *sattva*.” (Chapple 104). Right use of the macrocosmic community in the *Ṛg Veda* leads to right use of the microcosmic brain in you. This Vedic action has as its goal the creation of balance in the natural universe, and to help the community find equanimity and oneness with nature in the face of monsoons, draughts, agricultural challenges, and illness. In other words, the goal is *sattva*.

In performing an action, one must have faith (*śraddha*) in its efficacy. Practice is a creative, transformative, and symbolic act both occurring in and performed by the body. It moves from the macro to the micro to draw in *prāṇa* (life force), *ātman* (the soul), and *tapas* (the greatest possible state of creative power).

Personal equanimity, or *sattva*, a union with the divine self, is the intended goal of practice as described in the *Yoga Sūtra*.

The application of yogic practices causes a progressive subtilization of one's focus, which is directed away from the gross manifestations of *citta-vṛtti* to the most sublime aspect of *prakṛti*, the state of *sattva*. When this is achieved, the resulting equipoise is defined as a state where distinctions of grasped, grasping and grasper dissolve (I:41). (Chapple 104)

But, as Chapple notes, it is discernment which brings us to a state of balance. In order to find balance, one must practice so the body can be free of its false union with experience. In a recent talk at the Ananda Ashram in Puducherry, India, Guru Yogacharini Smt. Meenakshi Devi Bhavanani said, "If you practice, you grow out of hang ups and traumas. It's just what happens. You don't work on the problem to solve the problem. Okay, this is what it is. And now the practice of yoga: *atha yogānuśāsanam*, the first sutra."

Again, as T.K.V. Desikachar, son of the legendary yoga teacher and therapist, Krishnamacharya, says, "Start where you are." This is the beginning of practice, being in your own truth about what you can and cannot do. Desikachar and his father took all their teachings from the *Yoga Sūtras*.

When it comes to using the sūtras to find a way out of *duḥkha*, Dr. Ganesh Rao said, "Pain is a memory, you have to remove the conditioning. The healing, where the transformation is, is in empowering a person to bear pain, help them to come to terms with it in a positive way."

Additionally, he talks about the critical nature of consistent practice. Sūtra I.12 poses the question, "how do we reach the state of Yoga?" and I.13 provides the answer, "practice for a long time without interruption, with a positive attitude and eagerness." Using yogic wisdom to

effect a change takes a long time. Painkillers are instantaneous. One must be available to taking the time to get well for good, to be available to transformation. The Sūtras also suggest that practice is preventive medicine and that negative perception or pain behaviors will not take root. Sūtra I.32 says, “if one can select an appropriate means to steady the mind and practice that, provocations and interruptions cannot take root.” What we find is an actual action plan from this ancient wisdom, which can be learned and applied. Sūtra I.33 gives instruction about how to treat others and I.34 suggests a breath technique with a longer exhale. And, finally, sūtra I.35 suggests monitoring the senses (sight, hearing, taste, touch, smell) and being fully aware of them in order to reduce mental distortions.

In a recent interview, Dr. Rao proposed that *Yoga Sūtras* II:16 through II:29 are a therapeutic roadmap. These practices lead to re-integration of the *guṇas* (*tamas*, *rajas* and *sattva*), but at the same time, this is a moving and ongoing process. Manipulation of the *guṇas*, which are essential to Sāṃkhya philosophy, is critical to healing from pain, injury, and addiction. The body locks up when it is frightened and confused as a result of fight, flight, or freeze hormones. It is entering a state of *sat*, awareness, which allows us to feel whether we are in too much *tamas* (rest or lethargy) or *rajas* (inspired activity or aggression). The idea is to find *sattva*, which is a state of balance. The most well-known of the suggestions in the *Yoga Sūtras* of Patanjali are the 8 limbs of yoga.

The application of the 8 limbs of Yoga moves the *Sūtras* from contemplative philosophy to activated science that can be used for the transformation of the inner being and perception. They allow us to be in a state of interoception, where we can feel what needs to happen in order to heal. The 8 limbs are as follows:

1. *Yama*: Social precepts. Treat each other well by practicing compassion, truthfulness, non-stealing, control of the senses, and control of desires. Dr. Bhavanani says when we move from I to We, we get well.
2. *Niyama*: Personal observances. Clean body and mind, contentment, keeping fit, self-study, believe in a force greater than the self. Being accountable for one's health, says Bhavanani is an important aspect of getting better.
3. *Āsana*: Physical postures. These are meant to be done to bring one to a state of steadiness and ease. The by-product of connecting breath to movement in gradually increasing ways creates wellness in almost all aspects of the human body, which creates a positive mind.
4. *Prāṇāyāma*: Breathing exercise, control of *prāṇa*, or life force, in the body is natural medicine and the closest intimacy we have to the divine. It bridges the gap between the body and the mind.
5. *Pratyāhāra*: Control of the inner senses, and/or detachment from external experiences keeps us out of the whirlpools of the mind which get ignited by desire.
6. *Dhāraṇa*: Focus and concentration, to keep the mind and being calm.
7. *Dhyāna*: Meditation on a divine creative intelligence creates a sense of hope and possibility.
8. *Samādhi*: Absorption of or with a divine creative intelligence.

These 8 limbs of the yoga practice allow one to experience the state of the *guṇas* and get in touch with the senses so that they do not overtake the practitioner, separate them from their community, and increase fear, worry, and pain.

One of the most critical aspects of yogic work, that which separates it from all other philosophical traditions, is the practice of breath awareness, or *prāṇāyāma*. This is how we become one with the divine, and experience life force as a practice. *Prāṇasakti* is the energy of life. The effect of measured breathing practices is profound. Whether we need more energy, calmer energy, or any variation in between, breath work is one of the most important practices to enhance the parasympathetic nervous system so one can make good self care decisions says Dr. O.P. Tiwari (Kaivalyadhama, lecture 2017). At Kaivalyadhama, pranayama was served up as one of the most important aspects of Yoga Therapy:

*Prāṇashakti* is responsible for the vegetative functions, but at the same time it steers the subtler psychological functions, too. In Yogic view, therefore, the nature of *prāṇa* and *manas* (mind) is considered as inseparable. This concept is not much different from the present psychosomatic concepts. We can say that rather it goes one step further as it is repeatedly mentioned in the texts of Haṭhayoga that one who controls *Prāṇa* can control the mind and vice versa. Therefore, the practices which try to affect *Prāṇic* or the vegetative-physiological activities are obviously considered to affect the mind as well. It is also advocated for the same purpose, that while practising *Prāṇāyāma* the mind should be applied completely to the practice itself thus making the internal awareness as an integral and obligatory part of the *Prāṇayamic* practice.

Prepared by SHRIKRISHNA, M.B.B.S., Ph.D. *Notes on Structure and Functions of Human Body and Effects of Yogic Practices on it*. Kaivalyadhama, Lonvala, India.

Dr. Bhavanani says mindset is critical to healing and that one can change pain behavior by addressing the fluctuations of the mind through Maharishi Patañjali's 8 limbs. He says, "*Yatho mana, tatho prāṇa*. Where the mind goes, there energy flows. You are facilitating

positive feeling and wholeness. Send positive energy in the affected region; warm, healing, positive energy, conscious positive energy. When we don't do this, we abdicate our own capacity for healing.” In fact, this is done when the inhale and the exhale are engaged.

Steinwand and Born state in their paper on yoga, trauma, and stress:

*In an analysis of existing literature, Büssing et al. (2012) found significant correlations between practicing yoga and positive effects... “it is quite likely that yoga may help to improve patient self-efficacy, self-competence, physical fitness, and group support, and may well be effective as a supportive adjunct to mitigate medical conditions, but not yet as proven stand-alone, curative treatment” (Büssing et al., 2012, p. 6). It should be noted that Büssing et al. (2012) included research which found evidence of positive correlations with yoga enabling more activation of the parasympathetic nervous system, (PNS) also known as the “rest and digest” system (Wainapel, Rand, Fishman, & Halstead-Kenny, 2015 p. 365) while lowering engagement in the sympathetic nervous system (SNS), also known as the “fight or flight” system (Wainapel et al., 2015, p. 365). These findings are promising regarding yoga’s role in lowering high stress levels for those that experience them often. (5)*

Dr. Sanjay Kumar, in his doctoral thesis entitled, “Cognitive and Cultural Metaphors of Wholeness in the *R̥g Veda*,” describes *yajña* as a Vedic ritual that was a sacred act of reintegration of the individual back to the undivided whole of the cosmic order. Wholeness is, according to Kumar, a practice of being part of a tribe and being able to contribute to a greater good. The nervous system is soothed by a positive experience with “other” and that can only happen when we are able to rest and digest and respond well. Pranayam practice makes that possible.

The ultimate goal of practicing Yoga, as stated earlier, is to become aware of and balance out the *guṇas*, resulting in integration of the *prakṛtic* being so that one can experience the pure *puruṣa*. While the Samkhya tradition, which emphasizes self-knowledge, describes the *guṇas* and their connection to the senses, it is the *Sūtras* of Patañjali which describe over 20 practices to bring the *guṇas*, and the senses-run-wild, into balance. Establishing balance, however, requires constant motion and readjustment. It is through the body, the *prakṛti*, that we connect with the *puruṣa*, divine, ever present consciousness, and this experience in the body is always changing and is an ongoing creative dance. It is *Ṛta dhiḥ*...

#### Chapter VI: *Ṛta dhiḥ* Sustained transformation

In his book, *The Artful Universe*, author William K. Mahony describes a unifying integrative principle, called *Ṛta* in Sanskrit, which comes as a result of shifted mental focus, or imagination. He says, "...principles of harmony come into being through the power of imagination; that it is by means of the imagination that this universal harmony is revealed; that it is the imagination that sustains that harmony when it is threatened and reconstructs it when it is destroyed" (2). He says "*ṛta*" is often translated to "cosmic order which holds all things together" and has also been translated as "truth." In Latin, as stated previously, the word recovery can be broken down as: re (return) co (with) veritas (the truth). Mahony also states that *Ṛta* is the precursor to the South Asian notion of *dharma*—"a set of ethical prescriptions that sustain the universe as a whole" (3). The concept of *ṛta dhiḥ* is closely associated with finding a wholeness so that one can create out of the deep self—in other words, be driven by *dharma* rather than *saṃskāra*. Sūtra II:21 (*Tadartha eva dr̥śyasyātmā*, "Everything exists for the sake of the self"), provides a deep relief in that it implies that each of us has a special gift which must be used. Arjuna is a warrior who must fight for the sake of universal stability, the alcoholic must recover



so he can carry the message, the injured and in pain need to return to their work, families, life. The definition of *dharma* provides a core idea in yoga, says Dr. Bhavanani, that of “right-use-ness.” He further states, “Yoga doesn’t negate the phenomenal Universe, but rather accepts its existence wholeheartedly...nothing is wasted, nothing is lost. Even pain and suffering can be put to good use.”

Pain, injury, and addiction reduce our feeling of freedom or liberation (*mokṣa*) and the ability to enjoy life. Instead, they rob us of our voice, and in fact, change our voice, creating problem and pain talk. The way we communicate is either part of salutogenesis, or pathogenesis. Always discussing pain creates more pain.

Referencing Sūtra II.20, Dr. Bhavanani comments that Hindu culture holds that *dharma* is the first aim of life; that is right usefulness (137). Arjuna recovers himself out of despair by accepting his role as it is ACTUALLY presented to him. The first step in recovery for an alcoholic is to admit he is powerless over alcohol, to accept his condition so that he then can be of the best use to the world (step 12) and carry the message of his awakening. When a person finds their way out of *duḥkha*, pain and destabilization, to *sukha*, purpose can finally be pursued.

Sūtra II:18 teaches the theory of the *triḡuṇa* and talks about recapturing *bhoga* (enjoyment) by always keeping the awareness on the *guṇas*. Living one’s *dharma* is only part of recovery, according to sūtra II:18: “Everything that manifests through the principles of luminosity, action and inertia is experienced through the elements and senses and exists purely for the enjoyment and emancipation of the seer” (Bhavanani, *Understanding the Yoga Darshan* 137). Luminosity, action, and inertia refer to the *guṇas*: *sattva*, *rajas*, and *tamas*.

In Dr. Bhavanani’s commentary, he says, “One should not deny the pleasures of the world. Rather, one should learn to positively enjoy and correctly use the senses and emotions

within the laws of dharma” (*Understanding the Yoga Darshan* 138). *Artha*, accumulation of wealth, and *kāma*, emotional, sensual, and sexual fulfillment, are also vital to constant growth.

While Mahoney states that *ṛta* comes into being through the sacrificial rituals of the Vedas, here, *ṛta* is defined as being the result of the practice of the *Sūtras*. These two perspectives differ on the process by which *ṛta* arises, yet the result is similar. The perception of the universe is stabilized and harmonious; things feel right (*ṛt*).

Mahony states that the Vedic *ṛsis* (priest poets) referred to cosmic order and divine law by the word *ṛta*. He further describes *ṛta* as “what has gone on forever” and as the essence of creative imagination (46) Thus, it drives both perception and purpose, which is embedded in the word *dhiḥ* (the root of the word *dharma*).

*Ṛta*, says Mahony, as both creation and the creative act needs to be expressed in words, or *Vāc*. *Vāc* is thought to be the precursor of the Goddess Saraswati, the goddess of wisdom, art, study, and music, and also the name of a great river in the Indus Valley in Northern India. This link between word and river, and its implication that both are key vehicles for commerce, life, food, and purpose is clear:

(i) the ordered universe as a whole is said to descend from a single, highest moment of being the poet describes as *Ṛta*; (ii) *Ṛta* is identified as the eternal Word, personified as the goddess *Vāc*; and (iii) all the various objects and events of the divine and physical worlds are thus different embodiments ...of a single divine Voice herself. (Mahony 54)

In other words, one of the key aspects of recovery from injury, addiction, and pain is that we regain our voice, or purpose. Our voice is our first expression of identity or *dharma*: *Ṛta dhiḥ*.

Dr. Rao said in his lecture on the *Yoga Sūtras* and their application, “They move us toward a reorganized brain: conflicts will go, health is a by-product. The question, then, is, what are you going to do with your health?” That doing is the *dharma*.

#### Chapter VII: Applied Yogic Science & Treatment and 11<sup>th</sup> Step Yoga

“We will not be wrong if we say that the whole of the Yogic discipline aims at increasing the internal awareness, which ultimately embraces the whole of the operational existence of the human being, from the level of gross body to the level of pure consciousness. This all-embracing new awareness leads to the correct understanding of one's own nature. It is an essential step for gaining a total control over the activities in all the spheres and at all the levels of one's existence. It ultimately culminates in making the personality totally integrated and balanced...” (Shrikrishna 5)

The purpose of this thesis has been to explain how the paradigm of *asat, sat, yajña*, and *rta dhih*, and the *Yoga Sūtras* of Patanjali can be applied to pain, injury, and addiction. This creative and effective application is a system I created, called Applied Yogic Science & Treatment (AYST), which is practiced on a massage table, and it also encompasses 11<sup>th</sup> Step Yoga (11SY), which is a group practice. AYST and 11SY have a fundamental premise that each human being lives in three worlds: real, imagined, and remembered. These are both interior and exterior. The aim of these two systems is to give people a chance to slow down and skillfully learn how to discern which world they are responding to in any given situation—present, past, future. My aim is to bring people to their real ground, help them to reintegrate, so they can be fully present in their everyday life and make use of their talents in the world—while at the same time acknowledging, as Dr. Bhavanani says, their “whirlpools of unconscious and subconscious” that cloud perception and action.

How does this apply to the physical body? It is also my theory that the *guṇas*, *rajas* and *tamas* are affected by the real, imagined, and remembered experience to the effect of either extreme stress and anxiety, or depression and lethargy. The third *guṇa*, *sattva*, represents the move toward the balance of those two experiences. And the *sattvic* state, the state of balance between rest and inspired movement is, in fact, a kind of constantly moving reintegration of the human experience of self.

There is a through line of experiential science which occurs throughout the history of yogic practices. Indeed, 100% of the texts and doctrines are, at purpose, about transformation on SOME level. Having culled through at least 100 studies on the effects of yoga on many things from trauma, to back pain, to pre-menstrual syndrome..., the thing which becomes most clear is that one does not need a study to see clearly that yogic practice, even when it is rudimentary, affects the body and perception--that there is always a clear psychophysical response.

I came to this thesis with a pre-existing bias: For 30 years I have been helping people fix themselves using yogic practices—awareness, breath, meditation, movement, detachment, self-study, guided imagery, manual therapy—when they could not move themselves. These practices help them find acceptance, hope and faith and accountability. My clients have ranged from a teenager with brain surgery, ironmen athletes, epic women athletes, professional football and basketball players, to corporate attorneys, CEOs, performers, high profile entertainment executives, including addicts and alcoholics, people with autoimmune disease, catastrophic medical conditions, sexual abuse, anxiety, and depression.

I was not trained to do this. It was something I knew how to do from the age of 6. Or, rather, it was something I knew how to see and process. I could tell where people were “off” physically and why. I did not have the language of yoga for a long time. I had intuition,

apprenticeships, hideous personal health problems, and a brain that was wired to see exactly what was wrong with both animals and people on a psychophysical level and know immediately how to fix it. It has always been axiomatic, from my childhood to adulthood scientific perspective, that pain, injury, and addiction are a complex situation which require a web of solutions that is delicate and ever changing and requires participation from the person in pain. I developed a flexible system of bodywork out of this, my personal embodied situation.

20 years ago, after years of doing what I loosely called Smiling Body treatments, which came out of my studying with esoteric body workers, dance rehab specialists, Joseph Pilates's first studio in New York, and avant-garde breath, body, and dance workers at Bennington College, I discovered yoga. I suddenly had a language for what I do, and many, many manuals and practices to support it. Because I have been clean and sober for many years, I developed 11<sup>th</sup> Step Yoga 12 years ago. This is a 12 Step Meeting with a yoga format. Two years ago, I decided to dive into the Master of Arts in Yoga at Loyola Marymount University. My intention was to support my theories about how yoga is a completely viable option for treating addiction. What actually happened was that it became clear to me that Yoga philosophy, when applied to the human sphere, simply put, helps people recover from just about any affliction. The culmination of this work was a recent Yoga Therapy trip to India with Professors Lori Fazzio and Shanna Hughes. There, at ICYER and Kaivalyadhama I was lucky enough to be in the presence of and participate in lectures with authentic yoga scientists: Dr. Anananda Bhavanani, Dr. Ganesh Rao, Dr. O.P. Tiwari, Dr. S.D. Bhalekar.

The result of my time in the Yoga Studies Master's Program has been the development of Applied Yogic Science & Treatment. I practice this at Attune Health Autoimmune and Inflammation Research and Health Clinic, and with private clients. 11SY for addicts and

alcoholics has benefitted greatly from this scholarly work and falls easily under the system of AYST.

Here follows a view of the systems of AYST and 11SY, as well as the stories of some of the people I have treated.

### **APPLIED YOGIC SCIENCE AND TREATMENT**

AYST is a system I created which is an amalgam of all that I have practiced and learned from my thousands of patients over the past 30 years, combined with the profound scholarship of the many, many yogic texts I have read, absorbed, repurposed, and reimagined over the past two years at Loyola Marymount University. It also has a strong foundation in yoga health science and is infused with many of the yogic practices I observed and learned about in India and many years of working with various body workers. It reduces pain, stress, depression, anxiety, and obsession which are related to medical catastrophes, autoimmune diseases, sports injuries, emotional trauma, misalignments, and addiction. AYST is either an adjunct to a diagnosed medical event, or a stand-alone treatment. It is meant to help the “fluctuating whirlpools of the mind” calm down and to bring the body back into balance, so patients/clients can discern what type of further treatment, if any, they need. AYST is not a pill, painkiller or quick fix. It is also not physical therapy or yoga therapy. It is a specific system built out of my life-long exploration of psychosomatic observation and treatment coupled with Yogic Science and Philosophy. It takes time and participation from the patient/client.

An important part of AYST is educating the patient/client. There are three areas of discussion that occur in the first session (I rarely use the Sanskrit, unless someone seems interested):

1. **Paradigm of Recovery Includes: destabilization, truth and awareness, practice, and recovery and purpose—this will be the experience in AYST. People come to the table in a state of destabilization, and to hear that it is the opening gesture of recovering gives them a huge amount of relief. Then when I tell them the rollout will be about becoming aware of their pain and how to deal with it, that they will have assignments to reduce their discomfort and increase their self-awareness, and finally we will find balance and must keep reinventing how to maintain that, they understand what we are doing.**
2. **Three Types of Discomfort (*duḥkha*): current, remembered, or imagined— What does this mean for them? What is going on now (current)? What are their fears about it (imagined)? What is it triggering (remembered)? Over time, I explain, they will be able to discern which type of discomfort they are in.**
3. **Physical Experience: Which energy predominates: Stress and tension (*rajas*), or lethargy and depression (*tamas*)? I tell them we will balance that out (*sattva*).**
4. **Relationships: I also ask them about their relationships to people and to themselves, including the language of the *yamas* and *niyamas*. How are their relationships with family, co-workers, friends? How are they treating themselves?**
5. **Goals: It is critical that each person who comes into AYST understands there is a goal. I describe it as sūtra II.46, *sthira sukham āsanam*—a stance or seat of steadiness, stability, and freedom or ease. We are looking for transformation from *duḥkha* to *sukha*—from discomfort to ease. I encourage them to**

understand that once transformation has happened, they need to keep practicing.

6. **Once a patient/client gets on the table, I let them know we are going to practice any of the categories I think they need most on a given day, and I use the English terms to explain these categories: āsana (manual manipulation), *prāṇāyāma* (breathwork), *pratyāhāra* (detachment from that which creates stress), *dhāraṇa* (focus on the positive), *dhyāna* (meditation in a few different forms), and *samādhi* (a feeling of being okay). Sometimes I use Sanskrit, sometimes I talk about the texts, sometimes all the yogic talk is just straight up simple English.**

- Equipment is a massage table with fresh sheets, a yoga block, bolster for legs, and cervical pillow, as well as lavender oil and massage oil.
- Time: 50 minutes
- 10-minute discussion with patient to determine what they think their needs are.  
Observation of patient's standing posture and walk.
- Patient dresses in easy workout clothes, lies down on the table under the sheet.  
Arrangement of props, if needed.
- Guided relaxation and open focus meditation to tune into the senses.
- Hands-on gentle *bone rolling* (a manual application I developed to relax ligaments and tendons—one can feel where the tension is doing this) to discover where the real stress in the body is.



- *Prāṇava* breathwork which focuses on sending breath to lower, middle upper lungs to determine breath usage and *prāṇa* uptake into specific areas of the body. I often put my hands exactly where I mean them to breathe.
- During this first half of the session I determine what the patient needs most on that day.
- Then, I dive into the work at hand with applied yoga postures—twists, spinal work, hip openers. There might be deeper massage, guided meditation to reverse negative and fearful thinking, awareness practice to feel and release tension, breath work to calm the mind. All this is to establish a *sattvic* experience and to reintegrate the three states of *duḥkha* and rebalance the *guṇas*.
- The session ends with giving the client very simple assignments in any of these categories—meditation, breathwork, movement...

### **AYST: Case Study**

When I first met with No. 1, she was a 62-year-old woman who was exhausted and had very little life force. She is a high-powered executive in the entertainment business. Over a period of 40 years she had numerous surgeries in her pelvis (including uterine cancer) and in her right foot. I was sent to her to see if I could help bring her back to her vital, beautiful, and inspired self.

No. 1 was in a perfect state of destabilization. I told her that. I also told her I did not really care what her medical diagnosis was, other than as a point of structural information. What I cared about was finding a way to get her back to freedom of breath, movement, and mind--inspiration. We agreed there was nowhere for her to go but to surrender to this process we were about to embark on together. She was in a profound state of *rajas* and *tamas* at the same time.

She was so tense that her outer body had the toned and tight muscles of a professional athlete, while her inner body was lethargic and unable to function. The pain down her right leg was so severe she could barely walk. Her stress levels from work were through the roof, and interestingly, the only time she did not notice the pain in her body was when she was working.

The very first time I put my hand on her to assess her physical tension, her whole body went into spasm as if she were on a rocky sea (which, in a sense, she was). I climbed right into the boat with her.

Over a period of six months, meeting twice weekly we have worked all aspects of the 8 limbs of yoga in varying patterns and practices, always with a moment where we come back to *sat*—assessment of what is going on in a truthful way. Through breathwork, meditation, applied *āsana*, detachment from her sensory experience, understanding the nature of her pain, and forays into bliss we have made profound, long-lasting and transformative discoveries:

- That her pain when we first met was not just a physical issue, but a ball of past, present, and future experiences and false perceptions
- That she was hanging on to her pain so she didn't have to bare personal witness to the childhood abuse which came up during meditation or the grief over the loss of her mother at an early age
- A reversal of her “pain behaviors” into self-care
- That she can discern where the origin of her pain is and breathe to soften it
- That her outer life affects her inner body
- When she is in *tamas* or *rajas*, and how to balance them out into rest and inspiration

- How to have the right relationships with people and not just absorb her clients' stress levels
- How to eat and sleep well and how important these are to her joy and freedom

Today No. 1's regular pain assessment has gone from a through the roof 10, to a regular 5 or lower. She has the same structural challenges she has had since day one of our meeting, but her awareness and perception has changed so much that she has a freedom that will, I believe, begin to work on her structure. We have finally reached the point where the whirlpools of her mind have calmed so much that we now can get out of the boat, step onto dry land and start working on her biomechanics.

### **11<sup>th</sup> Step Yoga**

11<sup>th</sup> Step Yoga is an effective bodywork and yoga modality for addicts and alcoholics which combines the 12 Steps and recovery principles of Alcoholics Anonymous with yogic philosophy and practice. 11<sup>th</sup> Step Yoga is the only recovery meeting with a yoga format that is sanctioned by AA's central office. It is an open meeting/practice that anyone can attend. It is taught on a volunteer basis by recovering yogins and yoginis (certified instructors) who have thoroughly followed the AA path. The cost is whatever the participant can throw into the donation basket. This is not rarified, monthly auto debit āsana fitness. It does not matter if anyone can even perform a posture. 11<sup>th</sup> Step Yoga serves up applied and intertwined yogic philosophy and science and recovery tools so that the sufferer can reintegrate back into the truth of themselves. We learn how to not attach to cravings, to dis-identify with the mental illness of the disease, think positively, and be of service to the world after many years of being a parasite to families, friends, and employers.

For the thousands of us who have recovered around the world, we know that the truth is that alcoholism in its purest form has little to do with what poison we over-ingest—that is just a

symptom of a deeper biochemical and neurological problem—too big a subject to address fully here. We are clear that without some help we live in the same type of excruciating despair and desperation, and even psychosis, that Arjuna did on the battle field. Only, the battlefield is our mind and perception. The Big Book of Alcoholics Anonymous, the textbook of AA, the symptoms of alcoholism are described as follows:

We were having trouble with personal relationships, we couldn't control our emotional natures, we were easy prey to misery and depression, we couldn't make a living, we had a feeling of uselessness, we were full of fear, we were unhappy, we couldn't seem to be of real help to other people... (52)

This is expert experiential science, proven on a daily basis since 1935 when the program was founded, and hundreds if not thousands of people have reached mature recovery worldwide. It is called a mutual aid program, or an altruistic program, notably beginning both its main texts with the word “We.” AA relies on the intelligence that says, “Help appears through the strangest of mouthpieces.” Just as Arjuna found assistance from his charioteer, similarly a 22-year-old street kid can find support from an 80-year-old WASP from Connecticut.

It is through 11<sup>th</sup> Step Yoga that I have come to understand that experiential science is the way we prove the efficacy of yoga. As Dr. Ananda Balayogi Bhavanani says in his commentary on the *Yoga Sūtra* of Patañjali, *Understanding the Yoga Darshan*, “Yoga is the science of experimentation through personal experience” (4). The divine, it becomes clear once you have practiced the 8 limbs of yoga, comes in unexpected forms to teach you how to practice. The *Rg Veda*, *Bhagavad Gita* and the *Yoga Sūtras* in many ways lay a true foundation for a roadmap for re-co-very, returning to the truth of yourself.

## 11<sup>th</sup> Step Yoga Format

This 12 Step meeting with a yoga format is a modern-day form of *yajña*, or a community ritual for the sake of compelling a spiritual union in whatever way is meaningful to the people involved. The steps mimic the destabilization of *asat*, *sat*, *yajña* and *ṛta dhiḥ*. We admit we are powerless, come to truth, practice patience, tolerance, justice and altruism, and finally, in the 12<sup>th</sup> step carry the message to others and practice the principles in all our affairs. The first word in the Steps is “We” (signifying admitted destabilization in order to find the truth); this is *asat* and *sat*. The final idea in the 12<sup>th</sup> step is, “We carried the message and continued to practice”; this is *dharma*. Every step in between is practice and recovery in action...

The 11<sup>th</sup> Step Yoga meeting is 90 minutes long with 60 minutes of theme, *prāṇāyāma*, therapeutic āsana and meditation:

1. 5 minutes. The leader and all present community members introduce themselves.
2. 15 minutes. Dharma talk where the leader states the theme. Eg.: WE. How we treat ourselves and others.
3. 10 minutes of guided *Prāṇava prāṇāyāma* into lower, middle, and upper lungs to bring in life force. *Ujjayi* breathing. Breathing to calm the parasympathetic nervous system by toning the vagus nerve: 6 count inhale, 8 count exhale.
4. 30 minutes of themed *āsana*, meditation, and breathing. This includes *Sūryanamaskāra*  
A for warm up. Forward bending postures to work on the enteric nervous system to help with serotonin uptake. Twisting postures for detoxification. Spinal flexibility and strengthening postures to help the body into a *sattvic* or balanced state. The guided meditation is meant to become an essential part of each person’s life. It is, in

fact, said in Step 11: “Sought through prayer and meditation to improve our conscious contact with God as we understood him, praying only for the knowledge of his will for us, and the power to carry that out” (96). Step 11 is very much aligned with Yoga Sūtra I.1: (*atha yogānuśāsanam*) “And now we practice the discipline of reintegration.”

5. A 30-minute circle meeting on the floor where people can share their experience of the theme.

**11<sup>th</sup> Step Yoga Case Study No. 2--An amalgamation of anonymous stories from 11th Step Yoga**

*“I had been to seventeen different rehabs. I’d been arrested while I was in a black out for punching a police officer and I’ve been hog tied to a cot in a women’s cell. There was no hope. In fact, it was beyond that. One last time I was locked in a room at a mental institution. I remember being so f\*\*\*\* up I couldn’t get off the floor and whimpering: “God Help Me.” There was a knock on the door. It was my grandmother. She came into the room and just sat next to me on the bed. She smiled and took my hand in hers and said nothing. I was so broken, exhausted and drugged, I fell asleep. When I woke up, the craving was lifted. In the clarity of the morning I remembered my grandmother had died five years earlier and she was the one who never judged me for my inability to stop using, she just loved me. I haven’t had a drink or drug for 20 years since. Because of that visitation my life was totally transformed. I’ve spent my life since then helping others to recover.”*

*– Jenny W.*

When a recovering person shares his or her experience, strength, and hope at a group level there is the same effect as in *yajña*—the divine comes in. There is always a through line of the inability to quit using (no matter how horrible the consequences), a total bottom (or bottoms) which means a demolishing of the ego, and then, a spiritual experience leading to resurrection from the hell of addiction. These stories are profoundly personal, have their own timing and message of weight and depth. These two situations are exemplified in *asat* and *sat*: destabilization to the point of recognizing the truth of ourselves.

An addendum to the *Big Book of Alcoholics Anonymous* says that “spiritual experience” and “spiritual awakening” have created personality changes sufficient enough to bring about recovery from alcoholism (269). The Patañjali *Sūtras* begin with the problem—a destabilized mind as a result of a fractured body-being. The result of practicing the *Sūtras* is a body which is *sattvic*, which has a balance of *tamas* and *rajas* and is no longer prey to uselessness (*tamas*) and resentment (*rajas*). The 8 limbs of yoga as laid out in the *Sūtras* are neatly mimicked in the 12 Steps...

- Admitting the truth about ourselves—we are fractured, and life is unmanageable.
- Turning our will and lives over to the care of an individual concept of divine creative intelligence
- A thorough personal inventory of character defects as a result of trauma and perception
- A spiritual cleansing of those defects
- Amends-making for the harms we have done and may continue to do
- Continued self-reflection and inventory
- Prayer and meditation
- Constant service to others including other alcoholics and all who come into our lives

Mystical experience, no matter what kind, is the launch point for reintegration, and as shown in this thesis is a prevalent aspect of Patañjali's *Yoga Sūtras*.

A cry for help into the darkness leads to union with God. Or, as in the case of Arjuna, a meeting with Krishna, who literally is the Song of God—the *Bhagavad Gita*. The result is freedom from bondage to addiction and despair.

In the *Big Book* a woman describes her experience of the light, or truth, coming in: “The walls crumpled—and the lights streamed in. I wasn't trapped. I wasn't helpless. I was free... I found I had come home at last. There is another meaning for the Hebrew word that in the King James version of the Bible is translated “salvation.” It is: ‘to come home.’ I wasn't alone anymore...” (228). She still had the affliction, she needed to drink, but the consequences were dire, but it didn't matter—she was free from the problems of her body which was driven by a fractured spirit and *avidya*—ignorance and isolation. Recovery is so full of ironies: In the face of collapse and despair, in the face of the total failure of their human resources, they found that a new power, peace, happiness and sense of direction flowed into them. (*Big Book* 50)

Humility, letting go of ego attachments so that we may have an entire psychic change, is critical to recovery. Step One of the 12 Steps says, “We admitted we were powerless over alcohol and that our lives had become unmanageable.” *The 12 Steps and 12 Traditions*, the other important text in AA, says, “Who cares to admit complete defeat?” and continues, “Only an act of divine Providence can remove it from us,” referring to the rapacious creditor, alcoholism (1). An act of divine providence is an important concept. Throughout the program there is an emphasis on finding a power greater than oneself and constantly maintaining relationship to that power through service to others.



The implication of the first step is that in order to rise, we must fall. “Admitting complete defeat” is a state which most addicts, in hind sight, see as the bedrock of freedom. “Pain is the touchstone of growth” is an important phrase in the 12 Steps. Or, as Krishnamacharya says, *duḥkha* wakes us up.

*“When I landed in rehab I thought it was the worst moment of my life. I felt I had lost everything emotionally, physically, spiritually. Now, ten years later I have come to understand that my darkest moments are always where grace comes in and I am transformed...”*

*--Seth R.*

An act of divine providence can only occur when we are broken. It is humility and shame, whether self-inflicted or the result of traumatic experience, which provides fertile ground for the entry of God. Hitting bottom and releasing the ego is a pivotal moment in the mystical experience.

Dr. Bhavanani says, “The first step in healing and recovery is an understanding of where you are and who you are. Very few people can move their hands from their eyes and this is where hatred, misperception and resentment lie.”

A bottom, or a soul-crushing experience, forces the blinders off and makes us available for help from the divine. Says Dr. Bhavanani, “A sense of separation is the root of all disease. When you are able to perceive yourself as you truly are, you become one with others and you have a healthier system.”

After the lectures by Dr. Bhavanani at ICYER, there is a gesture one uses after prayer and meditation. The hands are rubbed together to create the warmth of solar energy, they then are

brought to the face to cover the eyes so one cannot see, then they are brought away from the eyes so sight moves from inward to outward and one can finally see. This also summarizes the experience of blindness that addiction and alcoholism creates, implying that the blindness is self-inflicted, but can then be transcended to freedom. A bottom, in other words, is a mystical experience which comes in strange and infinite forms, allowing the blinders of addiction to come off and light to pour in.

On January 30, 1961, Dr. Carl Gustav Jung, the famed German psychiatrist, wrote Bill Wilson, co-founder of Alcoholics Anonymous, a letter which ended with the following:

“You see, Alcohol in Latin is “*spiritus*” and you use the same word for the highest religious experience as well as for the most depraving poison. The helpful formula therefore is; *spiritus contra spiritum.*” This is translated as spirit fights against spirits, or in contrast, spirits fight against spirit. In a post script Dr. Jung added, “As the heart panteth after the water brooks, so panteth my soul after thee, O God” (Psalm 42:1). It was Dr. Jung who specified that a spiritual experience was the only cure for alcoholism and addiction. His idea was that the mystical experience is a consciousness which changes the way we see the world.

The Big Book of Alcoholics Anonymous recounts a session between Dr. Jung and a desperate alcoholic, Roland H. Roland H. had been in the care of Dr. Jung for the treatment of his illness. After treatment for quite some time,

“...he believed he had acquired such a profound inner knowledge of the inner workings of his mind and its hidden springs that relapse was unthinkable. Nevertheless, he was drunk in a short time. More baffling still, he could give himself no satisfactory explanation for his fall...He begged the doctor to tell him the whole truth and he got it.”  
(26-27)

It goes on to say that Dr. Jung told Roland H. that he was “utterly” hopeless and would probably have to go under lock and key. This is such a critical aspect in the program of recovery, as the book underscores that no one gets sober without spiritual help.

Dr. Jung said to Roland H.:

“...Here and there, once in a while, alcoholics (of your hopeless kind) have had what are called vital spiritual experiences. To me, these occurrences are phenomena. They appear to be in the nature of huge emotional displacements and rearrangements. Ideas, emotions and attitudes which were once guiding forces of the lives of these men are suddenly cast to one side and a completely new set of conceptions and motives begin to dominate them.” (27)

In this case, Dr. Jung was a symbolic Krishna, as is the one on one work of one alcoholic to another.

11<sup>th</sup> Step Yoga over the years has helped hundreds of people find their way back to integration through self-realization in real time. It is the ultimate community ritual with steps that mimic the holistic healing and perception changes found in the Sūtras. We don’t necessarily speak of the Sūtras in the implementation of this process, but for sure, we practice them.

### Chapter VIII: Conclusion

In 1917 Swami Kuvalyananda created the first ever research journal to publish articles on the effects of Yogic techniques on the psychophysiology of practitioners. This journal, called *Yoga Mimamsa*, published groundbreaking scientific studies which were meant to determine how yoga practices created emotional wellbeing while a subject was in a disease state. In other words, did certain practices change experience? Kuvalyananda’s goal was to take the superstition out of

yoga and to bridge science and yoga with scientific studies. In 1961, the first ever Yogic Hospital was created at Kaivalyadhama because the understanding as a result of research was that yoga in fact changed perception which changed experience and vice-versa. There were 70 beds in the hospital and this was an important step in holistic health care. There are fundamental differences between the Indian Yoga Therapy and Yoga therapy in the United States. The former is first a text-based practice, no matter the diagnosis. American Yoga therapy is first diagnosis-centered, then aspects of yoga, particularly modified āsana and *prāṇāyāma* are used to treat specific disease.

My bias in this thesis is that I have been working with patients and clients for 20 years in a methodology which combines alignment analysis, gait analysis and structural anomalies which reveal underlying traumas that have an emotional or physical root. As a practitioner, most recently, the work has been to apply, in a creative way, the understanding of the paradigmatic arc of *asat, sat, yajña* and *ṛta dhiḥ* and provide a *darśana* (insight or vision)—so that patients understand where we are in treatment and where we are going. Then to apply the relevant philosophical constructs from the *Yoga Sūtras* to patients with serious medical injuries, ongoing pain, or addiction. The methods I created, AYST, took form and name as I studied the texts from a scholarly point of view. IISY, which has been thriving for 12 years, was also bolstered by my study of the texts. While the results of Applied Yogic Science and Treatment are primarily qualitative, there is a real need to create an efficacious assessment tool specific to this work. In addition, unlike strictly pharmaceutical Western medical interventions, this process requires commitment and intention from the patient.

Dr. Bhavanani said: “One must continue to practice and obtain something and maintain something through yoga. Patients don’t have to do yoga, they have to become the yoga. Breath,

meditation, postures, how you treat people. The yoga is a relationship and pain and illness take[s] us out of relationship.” Dr. Bhavanani also says that a practitioner must be creative and attentive and aware, that no patient is the same, and so the treatment must be a fluid application of solutions. “The approach of yoga is to go to the root cause. You must know where a person is in order to take them somewhere. Patients are not just their medical diagnosis,” says Dr. Bhavanani.

AYST and 11SY are not permanent fixes. Instead they allow people to become self-sufficient and pro-active in their healing process through ongoing practices. The *Sūtras* imply that transformation and recovery are ongoing processes. Says Dr. Bhavanani: “We bring a patient to *saṃtoshā*, contentment with any situation. They become *atripta*—eternally satisfied.”

One of the key aspects of AYST and 11SY is to dis-identify with the *duḥkha*. In the case of medical conditions or injuries the patient is encouraged not to claim ownership, for example, to say “my diabetes.” Recovery recognizes, literally re-cognizes, “I am not my thoughts, not my physical cravings.” However, the phrase “my name is Abbie and I am an alcoholic” for example is simply claiming a truth about one’s self that reminds us to not attach to a physical craving since it is literally just a delusion. The conscious mind, the *puruṣa*, cooperates with the sense organs, the *prakṛti*, and one can then discern one’s own condition; this requires a study of the self, leading to a self-understanding.

Three of the Indian experts referred to here, similarly describe the patient in recovery’s efforts to change perspective on disease. Reframing thoughts and language are an important part of the task of recovery.

“Anyone can live a yogic life, regardless of the condition they are in,” says Dr. Rao. This is key. Inherent in this lifestyle is having a sense of “WE, not I. A sense of separation is the root of all dis-ease; *we* is actually the first word in 12 steps of recovery. Dr. Bhavanani points out that

this is why the Yamas and Niyamas, the social and personal precepts come first in the 8 limbs of yoga. “The moment you stop grasping and start giving, harmony begins to manifest,” he says. Dr. Bhavanani continues: “When you can perceive you and others as one, you have a healthier system. Then relationships blossom. When mind and body feel as one you have psychosomatic health. Subjective attachment vs objective ability to deal with it. Yoga = quality of life.”

Studying Yogic philosophy in the way suggested in this thesis, as a practice intended toward recovering from pain, injury and addiction, brings about transformation which is a moveable, evolving state. Dr. Rao explains it as, “When A changes to B, it can go back to A. But when A transforms to B, it can never go back.” AYST and 11SY are predicated on the fact that people come to the practices disorganized by the trauma of pain, injury or addiction. This destabilization is a doorway through which transformation can truly occur. Transformation is when one literally takes a new form. Change is when a form is there already and it is just changed.

Experts on Yogic philosophy agree that it is in the moment of *asat*, where the reintegration launches: *atha yogānuśāsanam...* (Sūtra 1.1). This is the place where recovery begins and false perception of self and circumstance crumbles. *Yoga is about coming to the present activity to be with the pain*, says Dr. Rao: “People run away from pain and this running is caused by fear. In the brain, fear, pain, and memory all come from the same place: the amygdala. One of the most important aspects of dealing with pain is discerning what kind of pain it is.”

Yoga practice offers the ability to discern what type of pain a patient is dealing with, what type of stress one is dealing with (current, remembered, or imagined, according to categories laid out by Steinwand and Born.) Suffering occurs when one identifies falsely with the body-mind, as clearly outlined in the *Sūtras*.

Right perception, from a Yogic point of view, is consciousness unfettered by imagined and remembered pain. It is vidya—clear vision. Current pain may be part of that and can be dealt with. Avidya, murky perception and delusions happen when current, remembered and imagined effects of trauma come together to take us out of balance. Right vision *dhih* happens when one can be firmly planted in one’s purpose, or *dharma*, and find a *sattvic*, or balanced, state. Perception changes as we change, and it is different from unblemished consciousness. We experience the world and perceive it as such, which affects our awareness of the *gunas* and the practice of the 8 limbs of yoga. But, as Dr. Bhavanai says in reference to Sūtra II:20, “As we go on removing the different layers of false perceptions, we ultimately become one with pure consciousness” (139). When we become one with pure consciousness, this is the state of being fully present, without judgement, in *samādhi*, despite circumstances, regardless of our own condition. Recovery.

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