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Original Article

Quantum Psychology **Integrating the Psychologies into One Cohesive Science of Mental** Health

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Abstract

All the disparate paradigms of psychology—psychoanalysis, cognitivebehavioral, humanistic-phenomenological, transpersonal, Jungian-Yoga psychology, and Tantra-energy psychology—are integrated with one integrative fully science-based quantum psychology. We also outline how psychotherapy would be under this integrative paradigm.

Key words

psychology, mental-health, quantum, psychotherapy, consciousness.

About the Authors



Amit Goswami discovered the solution to the quantum measurement problem and developed a science of experience. He developed a theory of reincarnation and integrated conventional and alternative medicine within the new quantum science of health. He is the author of numerous books. Amit started the quantum activism movement, establishing a transformative education institution, Quantum Activism Vishwalayam, based on quantum science and primacy of Consciousness.



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She is a co-author (along with Dr. Amit Goswami) of the recently released books, *Quantum Spirituality, The Quantum Brain, The Quantum Reenchantment of Your Reality* as well as of the upcoming books, *The Quantum Integrative Medicine, The Return of the Archetypes.*

Introduction

Many people think of psychology as the science of mental health. But then, what is mental health? Can there be a science of mental health? Well, there is a branch of psychology, behavioral-cognitive neuroscience, portends to build on scientific principles, brain biology or neuroscience. But this is only one branch. Moreover, in our experience, this branch of cognitive1,2 behavioral3,4 psychology and its related psychotherapy is based less on theory development [of an experiencer/self & experiences] and much more on clinical data in the form of randomised

controlled trials to support their effectiveness. To our disappointment, in the minds of the academic scholars, this evidence-based psychology and psychotherapy has more value compared to other models.

Fortunately, many in the psychology and mental health professions consider this scientific approach inadequate. They invoke additional organizing principles in dealing with mental health issues. The evidence-based tradition of psychology scoffs at these efforts.

The truth is different branches of the psychology profession use different metaphysical paradigms to define their identity;

there is no agreement about the right metaphysics for psychology, a very unscientific situation. Sometimes psych professionals themselves compare the situation with the fable of blind people studying an elephant. Each comes up with a different description because each of them has only a limited scope of observation limited by their belief system.

Yet, the success of the profession as a whole is undeniable, as undeniable as the inadequacy of the individual branches. The purpose of this article is to show a) why each individual branch has limited success within its scope; and b) develop a new integrative paradigm based on quantum physics for the treatment of mental health with a well-defined correspondence limit for each of the branches.

The amazing news is that this integrative paradigm based on quantum fully adheres to the traditional spirit of science—a theory of integrative psychology backed up by empirical data. Why is this important? Science has two basic principles: theory and experiment. In the absence of an integrative metaphysics, that is theory, science becomes empirical data interpreted with incomplete and inconsistent theories and is not always credible.

As Einstein pointed out to young Heisenberg, famous for his (co-)discovery of quantum theory, the scope of our gathering evidence is always determined by our underlying belief system. In the absence of a specific verifiable theory, people use highly primitive, often unverified, even falsified notions in determining the scope of their observations.

Why Individual Branches of Psychology all have success, albeit limited

Why each branch responds well to some of the needs of mental health? The answer is simple. Each branch is based on some fundamental discovery about the human psyche.

It is fruitful to go over a very brief history of psychological ideas. Let's start with modern psychology. It began with Freud⁵⁻
8.

The modern health systems are based on the idea of disease. The initial discovery that began modern psychology, the great Freudian idea of the personal unconscious, a reservoir of suppressed and repressed memories of childhood or even adult trauma and unconscious conflicts in relation to primitive urges was Freud's solution of how people develop mental sickness. Freud talked about psycho somatic illnesses, mostly his work was initiated in patients of conversion disorder or hysterical patients who developed neurological symptoms but did not have any brain related organic entities to support the symptoms which they used to manifest. Repressed memories and intrapsychic conflicts can influence conscious behavior in inexplicable and uncontrolled ways. The lack of control is experienced as neurotic behavior.

Why is the idea revolutionary? Until then, all great scientific ideas of physics, chemistry and biology originated from Newtonian conceptualization of how material objects move in what physicists and scientists including mental health professionals for psychological objects of conscious domain see as one and only domain of reality, space and time. Freud^{5,7} was positing that there is another domain of reality (for psychological objects at least)—unconscious—that determines human behavior in space and time, our conscious reality.

Naturally, there was huge opposition to Freud's idea from the scientific establishment. In response, the opponents developed the idea of behaviourism in consonance with Newton's great theory of determined movement of material objects: All human behaviour is a determined behaviour due to environmental conditioning. Not a new idea; a rehash of Newton's great idea used in the new context of psychological objects. Scientific? The idea found experimental verification in the form of Pavlov's famous experiments with how dogs are conditioned and subsequent studies of child and adult development.

Is Freud's idea scientific? Yes, it is. But it took decades for verifying the idea of the unconscious. In the meantime, the controversies created around Freud's idea substantially affected further progress in that direction.

Meanwhile the proponents of behaviourism got a boost from the development of

computers and the idea of artificial intelligence. Maybe the brain can be analysed after all by applying the idea of computer programs. Assume that brain can cognize and brain itself develops its own software—call it mental programs—according to which it behaves.

Is the idea of mental software a great idea or what? It is. In this way, the new paradigm of cognitive-behaviourism was also founded on a great new idea.

The concepts of conditioned homeostasis and mental programs of conditioned behavior are a good starting point for defining the human condition; add neuroscience and include the concept of unconscious brain programs (of negative emotions and pleasure) to simulate Freud's⁸ great idea of the unconscious, and the cognitive-behavioural paradigm becomes even better. even more ubiquitous in its scope. This is how the behavioural paradigm of cognitive neuroscience stands today.

Psychologists should not be surprised that cognitive-behavioural therapy is the most popular one today, either. This is because an overwhelming majority of people (maybe 85% according to an estimate by the psychiatrist David Hawkins) more or less live in the base-level human condition.

The great Newton did not stop with defining homeostasis for material movement—the state of inertia; he also discovered how forces change the state of inertia. What is

equivalent in psychology? The pressure of environmental adaptation is one agent of change. The psychological environment changes: the old programs do not provide mechanisms for adequate response in the face of challenging environment. Mental & emotional disease develops. The way out-therapy-is reprogramming. Cognitive Therapy does incorporate the idea of reprogramming albeit within limited or pre-existing context but unfortunately, does not address creativity explicitly. For example, reframing of the belief system is employed in therapy but usually by adopting rational thinking. Rational Emotive Therapy is an example. But the gross brain hardware does not change in the time scale of human lifespan not-withstanding degenerative neurological conditions. The data showing changes in hippocampal volume and also in the Anterior Cingulate Cortex (ACC) in some studies must be attributed to the updates in mental software. Synaptic plasticity does allow changes in the patterns and number synapses which accommodates changes in software. But then the question arises, is the software material, an epiphenomenon of the hardware? Can it be? Even if it were, is reprogramming using permutations and combinations of old programs enough to cope with a new situation?

Creativity is an old human phenomenon that has been known in talented people and geniuses since antiquity. Field researchers in the 1920s discovered the creative process behind people's creativity. The assumption raised its head that maybe creativity is a universal phenomenon available to all people. When the process was not known, when people had approached creativity blindly, only a few could excel in it—we called them geniuses.

What does it take to create? The psychologist Carl Rogers gave one derringdo idea in the face of behaviourism: open mind. You are more than your brain; you are your own self with free will. Open your mind from the tyranny of the known programs making room for the unknown. Another psychologist, Rollo May explicated the creative dynamics-encounter of the self of the unknown and the self of the known-call it the ego. Existentialists and phenomenologists propounded the idea of present centeredness to define the self of the unknown. Forget the past memories and programs; don't weave a future with your past memories either. Centre in the present.

Such ideas are not entirely new, but they were new in Western philosophical thought. In the East such thoughts were developed millennia ago (see below). Even today, such ideas are propounded by spiritual wisdom teachers. Such ideas were coming to the West in the 1950s and 1960s. That gave the new paradigm of humanistic-phenomenological psychology some additional boost and an empirically proven epistemology--meditation.

Is there empirical data in favour of a higher present-centred self? There is now solid functional magnetic resonance imaging (fMRI) evidence that at the present moment, the self-experience becomes allover-the-brain acting in synchrony experience vis-à-vis the ordinary selfexperience of the ego, which is localized in prefrontal cortex. What this humanisticphenomenological paradigm said revolutionary: there is enormous human potential available to us only if we adapt creativity to explore them. Before this idea, psychology was disease-centred; the paradigm creators were trying to find ways for new and effective therapy to cure mental disease-neurosis and psychosis. Perhaps we may take a more positive with the humanisticapproach phenomenological way of balancing creativity and conditioning and live a life of mental health free from disease!

The psychologist Abraham Maslow^{9,10} declared: there are three categories of people, not two, mentally ill and mentally normal, but three: mentally ill, mentally normal, and people of positive mental health. And then came another crucial discovery again by Maslow: hierarchy of needs. Humans have both survival-needs and higher needs. Ever since Darwin, scientists have acknowledged survival needs as the only drive for evolution and development. Maslow^{9,10} is saying that after people satisfy their survival needs, they become interested in exploring higher

needs even though that involves open mind, expanded Consciousness, the self of the new which Maslow recognized as not only present-centred but also transpersonal--that takes us beyond the survival-need-based personal ego.

Thus came the new paradigm transpersonal psychology. How do we get into the transpersonal domain and create positive mental health? One avenue is relationships, of love for example. Another avenue is creativity. Still another avenue was opened by the discovery of the psychedelic drug LSD-hailed as "Consciousness-expanding" drug. This chemical addition purely to Consciousness-expanding drugs already in use by shamanic traditions of Mexico and South America were so much more effective, they opened the doors of human perception so wide, that the propounders were compelled to generalize their concept of the human self.

The anthropologist Carlos Castaneda¹¹ wrote some great books about the shamanic traditions and their liberating worldview resonating with the transpersonal. However, Castaneda's ideas may not always be useful for effectively functioning in the real world in modern times.

Other researchers pointed out correctly that the millennia old spiritual practice called meditation¹²⁻¹⁷ does the same thing; in other words, meditation invites the

spiritual¹⁸ in us and expands Consciousness when the spirit responds. When LSD was banned from use, meditation seemed to be the only legal avenue for transpersonal growth. Since meditation is the vehicle of choice for investigating the higher self in the Eastern spiritual wisdom traditions (see below). transpersonal theorists turned their attention to these traditions.

Meanwhile, the psychology the unconscious that Freud^{5,7} developed was generalized by Carl Jung¹⁹⁻²² to include suppressed or repressed unconscious memory of humanity as a whole; this new compartment of the unconscious is called collective unconscious in contrast to the Freudian personal unconscious. Jung's approach led to the development of depth psychology (archetypal psychology) in the hands of James Hillman and others. Assagioli^{23,24}, Finally, Roberto contemporary of Maslow^{9,10}, in order to understand the superconscious peak experiences of present-centeredness in the paradigm of depth psychology of the unconscious had the insight to postulate a higher unconscious from which our spiritual experience of numina of transpersonal-self arises.

Such higher Consciousness has of course been the pursuit of all spiritual wisdom traditions although their popular exoteric representations—the religions--manage to hide this esoterism to a considerable extent. Esoteric spirituality though has survived in the hearts and minds of sincere seekers over millennia but to no avail because the epistemology has been vague and defined by an all or nothing pursuit from ignorance to wisdom with no intermediate stages of personal growth to show for.

A twenty-three years old analytical genius named Ken Wilber^{25,26} jumped the gun; but he did it with such a flare, such dazzling aroma of understanding spirituality with defined stages of wisdom (which had gone quasi-moribund because of a dearth of new ideas to unblock its logiam-the dearth of enlightened people), that overnight the transpersonal paradigm became identified as a modern take of perennial wisdom traditions. However, only the ultimate goal of Wilber's model of stage-by-stage awakening, the goal called enlightenment or self-realization, realizing that you are an immortal Consciousness, "one and only reality," for which the prerequisite is giving worldly desires. up on all accomplishments, remained the same and was well-defined. The intermediate stages were intellectual mental constructions with boundaries artificial that had measurable or experiential foundation reachable by consensus.

Enlightenment is a worthy goal of course! But the enormity of the task should have stymied all sane psychologists before they declared this is the one and only objective of human spiritual development. But what is a philosopher if he cannot think high? To make a long story short, Wilber himself eventually saw the trap created by the longknown unsolved logiam of spiritual wisdom traditions. These traditions, out of their frustration from failure to explain spiritmatter connection, declared that this knowledge is unnecessary, the material space-time world of experience of separateness arises from illusion, worldly material pursuits are illusory, but are they illusory, really? Why does the material world have such order which optical illusions never have? Moreover, the world of the living evolves toward more order. Psychology and mental health have to do with establishing more order in the psyche, and a modern teacher of Indian wisdom tradition Sri Aurobindo^{27,28} discovered in the anthropological data that human beings by and large are developing toward a destiny of a high degree of spiritual order; he then demonstrated the future of human development by personally transforming to a state of conscious living that he predicted as the future of all humanity. The Western philosopher-scientist Teilhard de Chardin²⁹ discovered the same trend of human development independently giving more weight to Aurobindo's ideas.

Wilber went another route, his fourquadrant theory of the human Consciousness. Separate human experiences into two parts—subjective and objective—the former the domain of spiritual, the latter the domain of science. Never mind the implicit dualism of such an approach. When you are enlightened, dualism will dissolve.

But perhaps, it is now time for us to talk about the ancient research in Consciousness that went into the development of not only the enlightenment tradition but also of lesser-known wings of spiritual wisdom traditions.

The basic most revolutionary idea-Consciousness (Sanskrit, Brahman) is the ground of all being, all our experienceswas discovered as early 7000 years ago in India codified in the form of the Upanishads^{30,31} also called Vedanta. The researchers used "meditation," and directly saw (Sanskrit darshan) this truth about reality. There has been much mythologizing about such experiences; but today, many researchers would recognize darshan as what creativity theorists call a "discontinuous" sudden aha-insight. In the same era, quickly followed ideas of equally revolutionary nature:

- 1) We have two selves: an inner self (Sanskrit antaratman or simply atman) of spontaneous experience (present-centred self in the phenomenologist lingo) and the ordinary ego-self (Sanskrit ahamkara). In more explicit imagery, atman is I am-ness (asmita); ego is I am-this-ness (idamashmita).
- We have five kinds of experiences—sensing (sensory

responses), feeling (vital energy for which the Sanskrit is *prana*), thinking, intuiting (archetypes for which the Sanskrit is *vijnana*), and *ananda* meaning happiness coming from expansion of Consciousness. Each experience defines a house or enclosure (Sanskrit *kosha*) for the movement of the source of these experiences). Later this led to the idea of each of us having a body in these houses, creating some confusion.

 When we die, our physical body dies; the rest lives on and reincarnates. This is the astounding idea of reincarnation.

Are all these ideas scientific, verified by experimental or empirical data? The idea of a connected Consciousness has been experimentally verified via transferred potential experiments. Read any of Amit's earlier books. We have already mentioned the fMRI pictures that provide verification of a higher or inner self (read also Goleman^{32,33} and Davidson's book, *Altered Traits*).

Carl Jung²¹ did a study of human personalities and found that indeed human personalities can be divided in four categories according to their principal cognitive mode of operation: sensing, feeling, thinking, and intuitive. There is now much data in support of reincarnation thanks to the years of empirical research of

Dr. Ian Stevenson^{34,35}, a University of Virginia psychiatrist.

However, the logjam of the spiritual approach was clear from the beginning. It was the lack of any explanation whatever of how and why the one and only become separate egos in people with brain in the material world. One popular explanation was the concept of *maya* conceived as a force that creates the illusion of separateness.

Ultimate spiritual enlightenment, according to this tradition, consists of the realization that the atman is a no-self when the illusory nature of maya is penetrated and when atman dissolves in the oneness of Brahman.

One object of debate that was never satisfactorily resolved was this: the purist Brahman view was that has qualification; nothing can be said about it. All the rest of what we experience is the result of Maya. A second view maintained that Brahman is qualified as Sat-Chit-Ananda, existence-awareness-happiness trio with sat being a transcendent existence, awareness defined as subjectobject split Consciousness in immanent experience, and Ananda being the goal of immanence.

This qualified Brahman is still Oneness without a second, however. How it comes about is beyond explanation, beyond Maya. Maya only acts on this qualified Oneness and produces subject-object

separateness, the subject-object split awareness. In this way some room is made for the scientific explanation of the world of our ordinary experience. This creates space for seeing order and relevance in the world of separateness.

The epistemological difference between the two views is enormous. In the first view, the goal of the spiritual journey is union with the immortal Oneness, call it enlightenment or liberation. Worldly stuff-all of it is just as illusory as maya, they are ignorance and they can be shed without the dawning of wisdom, no need to know the details of how works. Wilber's four-quadrant maya model^{25,26} is a modern attempt to do the same thing: divide our experiences into objective (It) and subjective (I) and interobjective (its) and inter-subjective (we)] and ignore the objective (both singular and plural) as the occupation of the ignorant.

Unfortunately, self-realization this way, an all or nothing one step enlightenment or bust approach hasn't worked very well, has it? The journey from ignorance to wisdom requires steps and stages for which the details of how maya works, details that can only be understood by a scientific approach that includes neuroscience and the rest of the paradigms of psychology.

In the second view it is called the Yoga tradition; the goal of yoga is integration: integration of transcendence and immanence, integration of the two poles of the separateness, atman and ego for

optimal functioning. Integration of science and spirituality as well.

Nevertheless, until Aurobindo's work, the tendency of spiritual psychology was to denigrate the world as has been the way of most spiritual traditions including esoteric Christianity. Even the powerful work of Sri Krishna, laying out the integration view of yoga in the Bhagavad Gita^{36,37} did not really catch. Jesus's teaching can be seen to be promulgating the world-negating view in the customary four Gospels, Luke, Matthew, Mark, and John. However, in the Gospel of Thomas, Jesus supports yoga as integration—integration of the two selves. integration of outer material and inner spiritual, and the integration of even the male-female dichotomy (see later). We may call this form of the spiritual journey Jesus yoga. It is in yoga psychology of Sri Krishna and Sri Aurobindo where we find references to the path of love, relationships recognized as a vehicle of spiritual development in transpersonal psychology. This love path became very sophisticated in the tantra tradition, but the mainstream quickly labelled it the left-handed path because it introduced sexuality as a path to awaken love.

As you can see, all these psychologies—modern and ancient--have been based on monumental discoveries, often rediscoveries, of various aspects of human Consciousness. What is lacking then? A demonstration that they are all scientific. What is also lacking is a scientific

connection between the spiritual and the material, that logjam of spiritual psychologies of ancient times. The same question that baffled the theoreticians of the olden days continued to baffle those of modern times.

For materialists, the logiam is the question, how does one introduce Consciousness in a science of objects? For post-materialists who have discovered the expanded Consciousness via direct experience (nothing else can change your paradigm), the logiam question is, how does the Oneness become split, becomes many?

The Main Source of the Difficulties of Constructing a Science of Mental Health

Psych professionals generally agree that if a person can more or less manage his or her affairs without others' help in an ongoing way, he or she must be considered mentally normal and healthy in a clinical sense. In other words, if the existing software is working, people are normal. On the negative side of normal, people of maladaptive software, software of a kind which are not helping them deal with the situations current life healthily and effectively are the mentally sick; on the positive side of normal are people of improved programs of the psyche-of positive mental health.

This is quite similar to how we think of physical health. However, there is a surprise in the case of mental health. Most of the experiences of the psyche is about

its objects—emotions, thoughts, intuitions. However, there is one exception. In addition to objective thought, we also have I-experience accompanied by an I-thoughtme. Remember what Descartes said? "I think, therefore I am". He assumed that the I-thought (me) is part of thinking; I-thought is also an object. But is it?

The answer is a resounding no because even I-thought-me has an individual aspect—call it subjectivity—that cannot be denied. Even scientists who have the dogma that everything is matter, psyche is "secreted by brain-matter as the livermatter secretes bile," admit that an experience that varies from individual to individual has subjective "qualia," a subjective "feel" to it.

In this way, consideration of mental health must also include the health of the "I", the source of the I-thought.

The experiences of I and thought, a subject and an object, constitute the field that we call awareness or often synonymously, Consciousness.

You see the source of the difficulty now, don't you? Science of mental health has to be a science that includes Consciousness, it must include not only psychological objects but also the I-experience, the subject. Consciousness is not merely an object. Traditional sciences are all science of objects. They are inadequate to deal with Consciousness. Go and figure it out.

Can we get away with defining Consciousness the spiritual way: Consciousness is the ground of all being, a Oneness without a second? No, we cannot. In Oneness, all is good, there is no suffering. Suffering is a problem of the subject-object split world of ordinary experience. You can shout all you like as mystics have been doing for millennia that suffering is due to ignorance of Oneness; remove the ignorance and all suffering is gone; it does not help because the prescription for health is even more difficult to handle than the disease. Mystics have to get real; we have to solve the problem of how the Oneness is embodied.

How Quantum physics is the Way Consciousness Enters Its Manifest Arena

The current Dalai Lama, no stranger to mental health issues, recently made a very astute observation: "no model of reality can be made without quantum physics". He said this referring to religious metaphysics, but it equally applies to the materialist metaphysics. The Dalai Lama comes from a spiritual tradition that goes back millennia of empirical researchers of Consciousness that today some scientists dismiss as spiritual and supernatural. But these researchers of the "spiritual wisdom tradition" propound that all things, all phenomena, psychological mental health phenomena included, are phenomena of Consciousness, not matter. Quantum physics is essential for making models of

reality because Consciousness is the ground of all being that constitute reality.

And yet, all your usual modes of information gathering—dictionary, google.com, Wikipedia—give you the overwhelming impression that quantum physics is the physics of sub microscopic objects, a science of objects, no different from Newtonian physics in this respect. What gives?

We live in the age of misinformation. There was an election in the USA in 2020 in which the incumbent presidential candidate lost. But the fellow held on to his belief that he won the election, the vote counting was fraudulent; half of the media cooperated, and he even managed to convince 45% of the country's voters that he won.

Some of the supportive media pundits even constructed theories of how the fraud had occurred. Traditional pundits call these theories conspiracy theories, and they are. Nevertheless, the fact is that these theories have a large following, there is huge consensus behind them; that makes them nontrivial.

This is the flip side of using evidence only to make science. You cannot make theory only to make science either. Quantum theory was formulated as a theory of elementary particles of matter, no denying that. But the picture it gives us is enigmatic. The elementary particles are not particles, they are waves. They are not ordinary

waves that we see in space and time either, such as water waves. They are waves of possibility; they do their waving, occupying many positions at the same time in a domain of potentiality outside of space and time. The domain of possibility is characterized by the capacity of interacting objects to achieve oneness defined by signal-less communication technically called nonlocality.

Is the original depiction of these objects as particles wrong then? No; when we measure the wave, it does show up as a particle defined by a single position at a given time, and not as a many-faceted object like a wave.

How does the theory explain that? It does not. The theory that explains how the wave collapses to a particle when we observe is called quantum measurement theory.

Here the verdict of quantum measurement theory. A human observer has Consciousness at two levels: individual and cosmic-the ground of all beings-that he shares with others. It is Consciousness in this latter role that chooses out of the many-faceted possibility wave the one facet that we find when we measure. An electron is a wave of possibility having possible positions; many when Consciousness chooses one position out of the many, the wave transitions or collapses into a particle. At the same time, Consciousness identifies with the observer's brain, a process called

dependent co-arising of the subject with the objects of observation takes place, call it conditioning and persona-making--the once cosmic Consciousness becomes personal conditioned ego-persona in the process.

In short, quantum objects are possibilities of Consciousness to choose from. The result of choice is the subject-object awareness of experiences. The rest is detail, but the details are important. One of these details is important for our present discussion.

How does the cosmic Oneness Consciousness identify with the observer's brain? By creating a tangled hierarchical mechanism between perception and memory apparatuses in the brain's neocortex (via science of the brain) defined by circular logic: perception requires memory and memory requires perception. If Consciousness enters (that is interacts with) the perception apparatus to perceive, it cannot actualize it without actualizing memory; but if it tries to actualize memory by interacting or entering the memory apparatus, it cannot do so either. In this way, it goes back and forth between the two apparatuses indefinitely and ends up identifying with the tangled hierarchy itself and considers itself separate from the rest of the world. This separateness of an experiencing subject and the experienced object is what we call awareness. Tangled hierarchy is the scientific explanation of what spiritual seers called Maya.

Can all the experiences of the psyche be explained in this scientific schema? Yes. Are the explanations scientific, that is verifiable, all the way? Yes. Starting with a book called *the Self-Aware Universe*, Amit has written many books, some solo, some with collaborators, elaborating the success of this new science—call it quantum science—in explaining human phenomena.

In this article, the authors will develop quantum psychology as a science of mental health, as a guide for mental health professionals to heal their clients from psychological dis-ease to psychological wellbeing. Psych professionals today come from several backgrounds depending on the particular branch of psychology that they get their training from. We will elaborate the connection of each of these branches to the integrative quantum approach, define the scope of the approach, and show how to expand on their scope as necessary to deal with mental health.

The adult human is to a large extent the product of her early upbringing. In general psychotherapists have discovered a huge amount of correlation between later mental disease and child development. In this way, we will also need to develop the quantum psychology of development of children to adulthood to middle and old age. That work will be published under separate cover.

Finally, we take on the subject of quantum psychotherapy and show how to build it on the shoulder of existing techniques whenever available.

We Create Our Own Reality

In the nineteen seventies, the physicist Fred Alan Wolf coined a phrase that got him instant fame: "We create our own reality". Initially, it created much confusion; people assumed that quantum physics is saying that we in our ego create reality with intention and perhaps a little meditation. Many new age aficionados tried the recipe to manifest nice things like a sports car to no avail. So, the movement subsided only to be kindled again and again with new additional ideas such as "intend and wait", "intend and wait for good stuff to come to you, stuff that is attracted to you."

quantum science of ls there manifestation that we can use to our advantage? Yes, but we have to recognize that the ego has to work in cooperation with the Oneness Consciousness. In other words, we co-create our reality. In this form, the slogan has enormous importance for psych professionals who want to heal people from psychological suffering. Why? Because psychologically speaking, according to quantum physics, there is no such thing as one unique manifest reality out there or in here or anywhere.

The confusion is created because the macro material reality is virtually predetermined reality. For macro-material bodies, quantum physics approximately becomes Newtonian physics giving it that deterministic quality based on which we assume that the physical reality is independent of Consciousness. But truly, it never is.

A common illustration of this issue is the concept of flat earth vs. earth as "sphere land." For a long time, humanity lived as flat earthers. In the olden days, unless you took a long-distance voyage using waterways, this dogma did not really hurt you in a physical way. However, psychologically, this is not so; flat earthers would develop an unfounded fear of falling off the horizon!

Take the case of the American 2020 presidential election: did the voting machine with deliberate programming fraudulently shifted votes from the incumbent to the challenger? In the aftermath of the election, for months, some forty-five percent of the electorate believed that this was so. They had a belief that the incumbent was omnipotent and could not lose. They interpreted the election result in terms of a conspiracy theory because that was the meaning that was consistent with their belief. Human beings are known to do psychologists mythologize that: this tendency with the legend the Procrustean bed. Procrustes was an evil man who forced his guests to fit his bed or else? Or else, he would either chop off

parts of the leg or expand them forcefully into deformity. Shakes up your common concept of consensus reality, doesn't it?

Psychologists beware! If such was the case with one person, your conclusion is to send the person to a mental hospital if the person engaged in violence (which some of these people actually did in the election fiasco mentioned above!). But because so many people believed this way to interpret the result, you cannot conclude that, and nobody did so.

In the early days of spirituality, a few savants declared that most ordinary people suffer from ignorance and mass hypnosis because they do not seek self-realization and liberation from samsara. If you ask most materialist scientists today, they will declare just the opposite: it was the savants who were delusional!

We create our own reality with the meaning we give to events according to the worldview we have, and that per se does not make us psychologically sick. What makes us mentally sick is this: our limited belief system creates emotional stressors that are resolvable only with new potentialities of meaning that we need to invoke to interpret the experiences of our lives.

An important example- A materialist/rationalist subscribes to the incomplete worldview of matter-is-everything philosophy that excludes spirituality. His belief system produces a

constriction of Consciousness and contributes to intellectualism (rational mind can solve all problems) that works for him. There is no sense in engaging such a person with rational discourse professionally. Only when such a person suffers from a disease is your opportunity to change the person's worldview because now, he has some readiness for change.

One can only turn to exploring new potentialities when there is readiness to change the reality he lives, a readiness that we call motivation.

Spirituality and Psychology are not separate and linear enterprises

The quantum worldview is teaching us another important idea: very all experiences come from potentialities of Consciousness. What we tend to call psychological pertains to the usual personal mental and vital software programs we develop while growing up to add to the universal software we are born with. But we always have access to new possibilities of Consciousness short of developing intellectualism to a pathological extent. And by and large, most children do use this facility to some extent and that includes the spiritual.

What is spiritual? There is a tendency in transpersonal psychology to identify spirituality only with the exploration of self-realization. Quantum worldview says otherwise. Consciousness sends us regular messages via intuition; intuition is

the real game changer, and it is extrasensory, ESP. The objects of intuition are called *vijnana* in Sanskrit, that Plato called archetypes-truth, love, goodness, abundance, power, beauty, justice, wholeness, and self-are important ones. They form the basis of all human professions.

Are archetypes spiritual? You bet; they are attributes of Oneness. Traditionally, they contribute to what we in quantum psychology call soul making, making software for a higher level of operation of thoughts and feelings producing transformed behavior.

In this way, you can see that moral development which happens even now, albeit in a highly limited and confused way, to most people pretty early is a part of soul making based on the archetype of goodness (toward family and clan) and love (toward mother) and so it is when a teenager through her exploration of sexuality discovers romantic love (toward a partner). She is exploring the archetype of love in a new context. Even an intellectual begins with the exploration of the archetype Educationists of truth. and healers including those of the psych profession are explorers of the archetype of wholeness. Artists and musicians explore beauty.

In the same way, business people explore abundance, and politicians, power and some of them even Justice. The reason we call their activities mundane is the poverty of the representations they make, and use guided by incomplete worldviews throughout human history.

In other words, only when we eliminate the role of intuitions and archetypes in our lives, do we succumb to a purely 'psychological' existence. That is also when we invite psychological disorder big time.

The Importance of Feelings and Emotions

One great accomplishment of quantum science is the development of a theory of feelings and emotions which we see as feelings plus the mental meanings given to the feelings by Consciousness. Currently, psychologists look at emotions as brain's associated response and body's physiological responses-conscious and unconscious-to suitable physical sensory stimuli. In the new quantum approach, we take not only the brain but also other important body organs, such as the digestive organs, the heart and the immune system as responders to suitable stimuli.

The left-handed counterpart of yoga psychology called tantra has given us the chakra system. Chakras are centres or regions along the spine where it is claimed that we can experience "pure" feelings uncontaminated by thought. What movement does such a feeling consist of? The tantra psychology never explained except to say that feelings are experienced as vital energy (prana).

In physics, do we associate energy with something moving or having the potentiality of movement? What moves in association of the body to produce the experience?

Modern biology has no convincing model for cell differentiation. The biologist Rupert Sheldrake has the creative insight that a new nonphysical epigenetic organizing principle that he calls morphogenetic field is required to differentiate how different organs make different sets of proteins to perform different functions through the turning on of suitable genes of their commonly shared DNA.

In quantum science, we adapt Sheldrake's theory in the ontology of primacy of Consciousness and postulate that the morphogenetic fields are quantum objects; as such they are quantum possibilities of Consciousness to choose from. This collapse movement of morphogenetic fields along with the functions of an organ is what produces the experiences of feeling.

The chakras are places where the important organs of the body are located. Each physical organ has a correlated vital organ in order to function; you can think of a functioning organ as a physical-vital hardware-software combo. The tangled hierarchical collapse takes place at three of the seven chakras—the navel and the heart in the body, and the brow chakra at the cortex, where we have self-identities. The vital energies at other chakras can only

collapse in association of these three chakras. For example, when we see a snake, our security connected with the maintenance function of the digestive and elimination organs at the navel and the root chakra is affected; the ongoing continual collapse of energy stops at both chakras, and we feel like energy is moving from the navel to the root and out, we name it fear via our mind, in association with thought.

The brain does take over the control of the functions of the body organs and in this way, emotions become associated with the limbic brain circuits of negative emotion and pleasure. More details have been given in other books, read for example, *The Quantum Brain*.

The Neo-cortex and The Mind

In the same way, in quantum science, we conceive of the mind as the nonphysical organizing principle that Consciousness uses to put meaning into its experiences. The collapse of the mental possibilities of Consciousness is experienced as thought. Tangled hierarchical collapse requires the neocortex to make memories in association with the collapsed meaning. In this way the brain makes a symbolic representation of mental meaning. Since mental thought is logical and associative, memories make brain circuits; and the brain memories of one-to-one mental meanings act much like computer symbols. In this way, you can think of a conditioned brain-mind as a hardware-mental software combo as well.

Archetypes, Intuitions, and Creativity: The Concept of the Soul

And then there is the experience of intuition for which the objects are archetypes. We do not have any way of making direct representations or memories of the intuitive experience; we can only represent them via thoughts and feelings—higher thoughts and noble feelings such as the emotions of courage and love.

In this way, we can creatively cultivate our intuitive ability and make positive emotional software of the archetypes other than the self. This we call soul-making following spiritual traditions. However, this is not the entire story of soul-making. A soul is a transformed ego; a new experience of I-thought, a new noble higher character has come into the picture. Maslow has called this self-actualization; think of it as soul-actualization. The soul is a description of intermediate experiences of the self; an expanded Consciousness between the contracted ego I/me and the fully expanded quantum self.

Does Quantum Physics Apply to the Macroworld?

This is the spectre raised by scientists of the materialist ilk against quantum science. In two recent books, *Quantum Spirituality* and *The Quantum Brain*, Valentina and Amit have addressed this question and the response is a resounding yes^{38,39}. We will not repeat the theory for the sake of brevity. The crucial point is to think of

approximately Newtonian body organs as measurement apparatuses for the subtle—vital, mental, and archetypal and apply quantum measurement theory. Just as a photographic film, when measuring an electron possibility wave becomes a (coherent) superposition of many positions, so it is for a physical living organ.

Self-Realization

The self-actualization experiences that we have with all the eight archetypes except the self, is correctly named because the self actualizes new potentialities to experience and develop conviction and character traits of behavior to reflect the change. In contrast, the direct experience of the self-archetype called self-realization is often a misnomer; the adept has oneness experience to be sure,but it is not self-realization unless the realization is that what we call quantum self is a no-self, it is not a stable station of self-identity. The no-self experience is a doorway to Oneness, which is unconscious.

This causes a lot of confusion; the spiritual literature is full of it. Many people get only a glimpse, get lost in the ananda of the glimpse, and take this for the true self, call it spirit, call the experience enlightenment, and so on. Fortunately, a few decide that if this expanded self is the real self, why hold on to the ego; so, they try to kill the ego. The spiritual literature reflects that too. After intense work, when desires are much reduced in intensity, a few realize the no-

self and exit through the doorway and experience that which, in India is called *Nirvikalpa-Samadhi* without separateness-and in the West is referred to as Godrealization. This is true self-enlightenment. No; you do not require to get rid of all your psychological baggage to acquire this state.

This is the difference between the Nirvikalpa samadhi of this kind versus Nirvikalpa samadhi of a deeper kind which is supposedly reached with the attainment of complete non-attachment to desire; here all psychological baggage must be dropped. This latter leads to Nirvikalpa of what the Buddha called *nirvana*—cessation of desire⁴⁰.

Quantum psychology explains all these exalted states. The last two are strictly speaking very confusing, because they really are about states of Consciousness where there is no subject-object split; in other words, they signify an exalted unconscious—higher or quantum however you call it, that we "experience" on a delayed basis going backward in time as a memory recall. Read Amit's book See the World as a Five Layer Cake.

What is most amazing is that the neuroscience data is showing promise of confirming the quantum theoretical construct of the Nirvikalpa "experience."In the work of Andrew Newberg and the discovery of brain epsilon wave of < 1 Hz a state of sleep deeper and different than

deep sleep has been identified. This may be a candidate.

The Five Bodies of the Human Being

What distinguishes non materialist and materialist psychologies the most is this: in the latter there exists more than one material body. These nonmaterial bodies expand the territory of psychology. In spiritual psychologies as well as in modern transpersonal and depth psychologies, it is recognized that human beings have five kinds of experiences in four worlds of possibilities of Consciousness and the allencompassing world of Consciousness in suchness. This has created the confusion that we have a "body" in each of these worlds-physical body, vital body, mental archetypal body (also called supramental body) and the bliss body which is Consciousness in suchness.

Ken Wilber^{25,26} sees these bodies as the great chain of being: body (physical-vital), mind, soul, spirit. He tries to picture these bodies as a simple hierarchy of "irreducible holons;" each holon causally affects the lower holon and in its turn is causally affected by the next higher holon in the hierarchy.

This picture is tempting; it follows the depiction of the Hindu Upanishads^{30,31} and the Judaic Kabbalah; Sri Aurobindo has gone along with it and given some justification; even Amit, in some of his earlier work cited above, has depicted the "bodies" in a similar way while

demonstrating that the physical is essential to make an irreducible whole or a holon, and therefore Wilber's way of generalizing the holon picture is not compatible with quantum science.

Quantum Psychology formulated here gives a clearer picture based on the hardware-software: concept of our physical-vital body is a hardware-software combo (body); our second body is a physical-vital-mental or physical-emotional hardware-software combo (emotional body); the next body is physical-mental hardware-software holon (mind); the fourth body (soul) is a physical-higher emotional holon; and the fifth (spirit or God) is Consciousness in suchness encompassing all the holons as unconscious conditioned possibilities plus infinite new potentialities for their creative change.

This depiction more clearly defines the territory of the science of mental health—the wellbeing of all our bodies, even the physical.

Mental health is mainly about well-being at emotional, mental, and soul, and spirit level of our manifest being. To reemphasize, we cannot separate the psychological (emotional and mental) from the spiritual (soul and spirit) entirely; they affect one another.

Ken Wilber's more recent model of the human being, the four-quadrant model^{25,26} is based on the idea that the subjective (the experiences of I and its plural of we) and

their objective counterparts (it and they) defines the four quadrants of conscious experiences and theories built to explain them giving us an all-encompassing psychology of the human being (fig. 1).

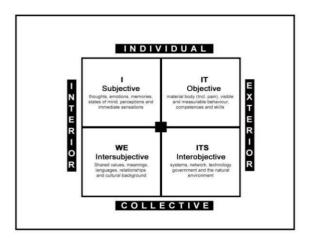


Figure 1: Ken Wilber's model

Unfortunately, this picture suffers from the same problem as above; the subjective and objective, the experiencer and the experienced, affect one another. Besides, on closer examination, you will find that the picture is dualistic; I separate from its experiences which does not fit non dualist metaphysics. Wilber claims that this dualism is the result of the fundamental transcendent-immanent dichotomy and goes away only with self-realization. This claim is not true either; any peak experience involving any of the archetypes leads to oneness of subject-object as well. Moreover, quantum science approach theoretically integrates the subjective and the objective anyway; and theory has been experimentally verified in its essential aspects. In this way, Wilber's

phenomenological approach loses all charm.

The Unconscious and the Conscious

Quantum psychology clearly defines the distinction of the unconscious and the conscious. The word "unconscious" is confusing until you catch the distinction: unconscious is unmanifest, domain of potentiality of which we are unaware. Conscious refers to subject-object split awareness.

The unconscious has three compartments:

personal unconscious (Freudian) consisting of possibilities that have been previously experienced by an individual and for which brain has made a memory. 2) collective unconscious (Jung, Hillman^{41,42}) consisting of possibilities of collectively and shared and ritualized nonlocally codified humanity's experiences as collective memory; and 3) higher or quantum unconscious (Assagioli^{23,24}) previously consisting of unmanifest emotional and mental possibilities as well as the forever new archetypal possibilities, forever new because they cannot be directly experienced or memorized.

The conscious likewise has three stations:

1) the contracted and conditioned ego or
(I)/me, where the I-experience is virtually
implicit; 2) the I/me experience of partially
expanded Consciousness; this consists of
the stages of the soul; and 3) the quantum
self.

The totality–unconscious and conscious – gives us the iceberg depiction (fig. 2) of Consciousness.

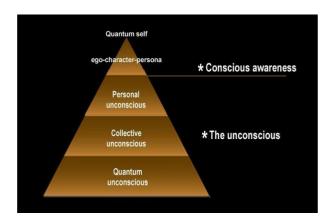


Figure 2: Iceberg model of Consciousness

The various shades of the ego correspond to ordinary states self-experience of implicit I-am-ness and is me-centred. The partially expanded states of I/me correspond to the preconscious domain and can be entered through meditation⁴³. The quantum self-experience is a momentary self-experience reached by intuition, creative insights, and pure feelings. They are called samadhi (*savikalpa*—with awareness--samadhi to be precise), satori, peak experience, einsof, holy spirit experience, etc.

Creativity

The current psychologies are all short in how they treat creativity, although both humanistic and depth psychologies have made notable progress in this area. Quantum psychology explains everything about creativity—typology, the arena, the creative process, motivation, and purpose.

In particular, take the creative process. Empiricists define 4 stages: preparation, incubation, sudden insight, manifestation. In depth psychology, we get the idea that incubation, just sitting doing consists of unconscious nothing, processing, but no explanation of why this helps. We also get the idea that creative insight comes from the higher unconscious, but no explanation of why the experience of the higher unconscious is sudden or Likewise. discontinuous. humanisticexistential psychology gives us the concept of the encounter and flow, and the importance of the gestalt, but cannot give adequate explanation why.

In quantum psychology, the contents of the unconscious are waves of possibility; when we allow unconscious processing while maintaining some implicit focus on the problem, the meaning generated in the focus (do)-phase expand in the unconscious as waves of possibility making bigger and bigger pools of possibility, increasing the probability for Consciousness to find the new.

The suddenness of the creative insight in quantum science is seen as a discontinuous quantum leap. When an electron jumps from one atomic orbit to another, it does not go through the intervening space. In this way, creativity is a discontinuous transition from known thoughts and feelings to the unknown without any algorithmic continuity.

In quantum science, the encounter is partly the encounter between the unconscious and the conscious, we call it do-be-do-be-do, alternative doing and being while maintaining focus, explicit in doing and implicit in the state of being. There is also an encounter between the ego and the quantum self in creative flow in the manifestation stage of the creative process⁴⁴. This encounter leads to the big insight of the quantum leap. The gestalt experience on the other hand is seen as a mini quantum leap of insight during the flow of the manifestation process.

Reincarnation

Quantum psychology with the idea of nonlocality classifies memory as both local and nonlocal. Nonlocal means outside space and time and nonlocal memory (Sanskrit *akashic* memory or *karma*) can be accessed at a future time and a different place. If a person in the present time can access the developing nonlocal memory of previous people of past times, she can be considered a reincarnation of these people of her past lives. This is the general idea.

What constitutes a nonlocal memory is a person's habit patterns and character traits collectively called karma. A special character trait is called *guna*—the way a person processes creativity.

With accumulation of reincarnational experience, a person develops maturity and gets into the creative exploration of the archetypes. At this stage a person chooses

the archetypes he wants to explore in the next life and also chooses propensities (karma) suitable for the archetypal exploration. This chosen archetype is called a person's *dharma*.

Evolution and Purpose

In quantum science, life is distinguished from nonlife by life's ability to precipitate subject-object split experience. Even an amoeba can experientially distinguish between itself and its environment. Another distinction is vitality, vital energy. Still another distinction is purpose; living requires purposive functional software. This is revealed in the biological arrow of time: life evolves from simple hardware-software to complex hardware-software.

For non-living beings at the macro level of matter, the territory of Newtonian physics, change is causal, no purpose. For living beings, the material hardware is causal, but the living software is purposive. Consciousness injects purpose in evolution via choice at the quantum microlevel of matter—genetic mutation.

In other words, quantum choice is purposive. Sri Aurobindo's analysis of anthropological data indicates that for human beings, evolution is the evolution of developmental software of the mind—how Consciousness gives meaning to its various experiences using the mind.

In this way, the data shows, that humans have already evolved to the third possible stages of meaning giving: 1) the era of the physical mind, Consciousness giving meaning to the physical, the anthropological era of hunter-gatherer; 2) the vital mind, Consciousness giving meaning to feelings making the emotional software, anthropologically, the era of garden agriculture; 3) the rational mind, Consciousness giving meaning to thoughts themselves, as in abstract or rational thinking; anthropologically, the large-scale agricultural-industrial-technological era. In this way, currently, Aurobindo and common sense predict that the purpose of the evolutionary movement of Consciousness is to develop the human of intuitive mind, exploring the archetypes and involved in soul-making.

Hierarchy of Needs

In the hunter-gatherer era, the purpose of the human life was defined by the low-level ego-need of survival, not much different than animals. There were gods in this culture, but they represented the cause of unexplained physical phenomena, nature gods.

In the vital era, higher needs show up already, the gods morph into archetypal gods, Apollo, Aphrodite, Lakshmi, Siva. That trend continued in the mental era of the rational mind.

Some confusion was created by the discovery of non-dual Consciousness in the pure form—advaita (nondual) with no qualification. Some clarity returned with qualified nondualism in which archetypes

represented by gods and goddesses made a come-back. However, later in religious thinking, the idea of many archetypal gods was replaced by the concept monotheism and dualism. highly confused ending with archetypal exploration becoming reduced to moral beliefs of ethical philosophy. Finally, with materialist science, even morality was denigrated.

One of the goals of non-materialist psychologies has been to revive the role of the archetypes in human development. It started with Carl Jung's 19 discovery of the archetypes of the collective unconscious, let's call them Jungian archetypes-the vital-mental representations of the Platonic archetypes that our ancestors created. Later, depth psychology has made efforts to return to the Platonic archetypes and their more accurate representation as gods and goddesses for spiritual development. Witness the work of the psychologists James Hillman^{41,42} and Jean Shinoda Bolen^{45,46} in the nineteen eighties and nineties.

The psychologist Stan Grof⁴⁷, co-founder of transpersonal psychology, identifies two drives in an adult human: hylotropy—drive toward ego survival needs and holotropy—drive toward higher archetypal value needs of regaining wholeness. The change from hylotropy to holotropy is found to arrive 1) at teenage, at the advent of sexual development; and 2) mid-life when one is

bored and misses meaning and purpose in the existing pursuits of youth.

Energy gives the capacity for doing work, getting things done, for accomplishments. For living beings to satisfy lower needs, the balanced movement of vital energy at the first three chakras is crucial. When lower needs are satisfied, the energy accumulates as excess. The normal pathway is for the brain to enter the picture and engage the brain's pleasure and reward circuits.

With reincarnational maturity, pleasure does not entirely satisfy and all the accumulated energy is not wasted away. With creative intentionality some of the excess energy finds way to rise to the higher chakras (that Freud^{5,6,6} called sublimation and quantum psychology identifies as mini quantum leaps), awaken new software of organ functioning and new energies and feelings at these chakras. Fear transforms into courage (at the navel) to create, defence of the old emotional programs gives way to love (at the heart), rational thinking gives way to intuitive thinking (at the brow).

Even so, there are two stages of development here: 1) in the first phase, a person, still partially motivated by survival ego needs of name and fame and material affluence engages in outer creativity; this happens when the excess vital energy at the low chakras goes directly to the brow bypassing the heart; and 2) only in the

second phase when with some awakening of the heart, outer accomplishments cease to satisfy entirely, the creative shifts her attention to inner creativity—the actualization of a new transformed self to explore creativity with expanded Consciousness.

Mental Disease and Psychotherapy

What then are the mechanisms for mental disease in quantum psychology, where do the things go wrong?

First, there are the problems of insensitive parenting that is responsible for much of childhood trauma, suppression-repression dynamic, and the development of subsequent emotional defence programs. For this, the psychoanalysts have done an adequate job of defining the problem (though Freud focused on sex and aggression the most) except that for therapy they concentrate more on the mental/verbal and less on energetic aspects of the disease.

It is a fact that children when they suffer emotional distress, contract their muscles. When back to normalcy, the muscles do not entirely recover; in this way, vital energy remains blocked in the contracted muscles, at points that are called *marma* points in Ayurveda and acupressure points in Traditional Chinese Medicine (TCM). Bioenergetic therapy using deep massage; tapping the acupressure points, etc. are new techniques of energy psychology that are coming in vogue. All this is fully

consonant with quantum psychology and constitutes quantum psychotherapy in the limit of weak defensive build-up.

When even the combination of psychoanalytic therapy and energy work is not enough to heal the defensive programs built around the trauma, then is the time to engage additional quantum psychotherapy using creative quantum healing techniques.

In the book, the Quantum Doctor⁴⁸, Amit has analysed the childhood upbringing of people in terms of the Ayurvedic concept of physical-vital doshas of organ functioning, and of mind-brain doshas for brain functioning. There are three kinds of mind-brain doshas:

The dosha of mental inertia or maintaining mental sameness. These people grow up with hardly any emotional challenge and tend to remain where they are (mental inertia called the guna of tamas in yoga psychology). In the absence of reincarnational maturity and additionally, with excessive engagement with information processing such as computer games and social media, these people literally get dumbed down. For them quantum psychotherapy can be effectively practiced in the limit of the cognitive-behavioral therapy-reprogramming (within

- the limit of same or similar context), NLP, etc.
- The dosha of hyperactivity severe rendition of which is Attention Deficit Hyperactive disorder (ADHD)(however, there are other factors as well, there are severe cases where the inadequacy of the brain hardware and connectivity must be addressed). This happens when a child meets only easy emotional challenges his in upbringing. His reincarnational maturity has endowed him with some creative capability (called the guna of rajas in yoga psychology) with which he solves emotional problems quickly and wants to move on with more problem solving of which there won't be much. In this way, these kids will develop fickleness, and eventually hyperactivity, which when pathological becomes ADHD.
- The dosha of intellectualism: When childhood. the problems encountered are mainly of the mental kind and the person is reincarnationally equipped high quality of creativity (called the guna of sattva) and additionally, if culture the pushes emotion suppression, these children grow up to adulthood as intellectuals virtually believing that "emotions do not exist," emotional people feign them to get their way. In this way,

they become quite detached and dispassionate. They may have high IQ, but they will be closed to intuitions as well.

In today's society, people of the second group constitute street-smart people of mediocre IQ and high degree of narcissism. People of the third group constitute the meritocrats, college educated high earning intellectuals. Both these groups manipulate the first group, who may be dumbed down, but are often religious people of some value-awareness.

The mental disease frequent in the hyperactive group, ADHD, has been a very difficult challenge for all existing psychotherapies. Here the full force of quantum psychotherapy, using meditation and creative quantum healing may be the answer. However, although such intervention has been found to be effective in mild cases, the efficacy of quantum healing for severe cases of ADHD needs to be further tested.

For the intellectual group, the most frequent abnormal psychological patterns are of depressive thinking, feeling and behaving. Once again, none of the existing psychotherapies may be sufficiently effective in dealing with the problem long-term (also, many existing psychotherapies may be insufficiently effective in their individual capacities), that is, produce permanent healing including character change. However, the recent extension of cognitive-behavioral approach^{1,2,4} called

positive psychology is a good beginning of healing, and so are psychotherapies such as psychodynamics and gestalt therapy based on psychoanalysis and its later developments.

There is also the problem of people with both doshas hyperactivity intellectualism which in case the pathological pattern appears like alternate episodes seen in bipolar mood disorder. It may not be purely a physical brain chemistry imbalance to begin with as always assumed in classical psychiatry. It is no surprise that chemical imbalance theory is no longer popular in psychiatry which has moved to network-based explanation than just the simpler imbalances of chemicals. The current functional connectivity and network-based explanation for the faulty software giving rise to psychiatric disorders could well be thought of as due to Doshas being reflected in the form of those connectivity issues that researchers of neuroscience are finding out in various neuroimaging studies and their resultant interpretations. More recently, researchers opened another front-immune have system inflammation affecting functioning of brain and other organs and defensive programs built around them. Here again, quantum psychotherapy may have to play a crucial role in healing.

For people who hear the call of higher needs and are capable of responding to that and engage in spiritual growth, is there any scope for things going wrong? Here quantum psychology, roughly in agreement with spiritual and transpersonal psychologists, suggests the following problems:

Vital energy imbalances and disorders

Both brain-mind doshas of hyperactivity and intellectualism that are seen to be empirically associated with psychiatric disorders involve vital energy imbalances at the chakras; the former pathological overuse of me-centred pleasure and gratification produces pathological bodyego at the navel chakra-narcissism; the latter produces imbalances at all the four chakras in the body; all the available vital energy is spent at the service of the rational mind at the sixth chakra. The remedy is adequate preparation consisting awareness of feelings in all the body chakras; and developing a modicum of creativity-conditioning balance (called yinyang balance in TCM) at each chakra.

Ignorance due to a lack of preparation and understanding of the goal of spirituality

In India of a previous time, people often became renunciate to avoid family responsibilities; thus developed a brand of "holy" people called sadhus who wore ochre robes like serious renunciates, pretended celibacy, begged for their food and clothes, slept wherever they could find shelter, even tried to meditate a little. But to no avail because of a lack of training and commitment. Not unlike people who were

called hobos in the olden days' West and currently are called hippies. Often these people smoke marijuana and misunderstand meditation in the marijuana induced slightly altered states as producing spiritual experiences.

Not to say that there were serious seekers in this bunch as well. These people eventually find their way to spiritual teachers and that of course is one solution. Then and now.

Did the solution ever work? More often, no. Again, this happened and still happens due to a big misconception of the only goal of spirituality being self-exploration. Good teachers would send people not ready for self-exploration home; however, gurus were and are not always so perceptive and they misled disciples then and do so now; their disciples receive premature training for which they simply are not ready. For some of such disciples, due to not welldeveloped ego, it becomes quite difficult when repressed emotions from personal unconscious flood their awareness, and their unpreparedness cannot handle such situations.

Remedy: adequate training of the gurus not only in spirituality but also in psychology and psychotherapy. Today, this would consist of spiritual transformative training of psychotherapists/gurus.

Lack of emotional and mental software needed for transformed structures of the ego consisting of honorable character traits (soul development).

This is an example of what harm ignorance-based pursuit of self-exploration at the hands of immature teachers can do. These teachers prematurely taught, some still do, kill the ego, get rid of the ego which is the source of all ignorance. But of course, a strong ego structure with good software is necessary for the journey of transformation in general, including the journey of self-realization toward the creative insight. The misconception arose because indeed, after the experience of self-realization, to go to the next step of noself-realization, one has to kill the ego in the sense of giving up much ego-attachments and needs.

Confusion about whether or not life is suffering and consequently about what has to be done about it

This is another example of ignorance that still continues because of the misunderstanding that the only goal of spiritual life is self-realization. Buddha was clear: for entering self-exploration with the objective of realization of no-self, and all that comes afterwards, the entrance requirement is the development of vairagya, all raga-likes-must fall away and then regular life does appear as suffering. A proper English word for this concept of vairagya was given by the

modern mystic/philosopher Franklin Merrell-Wolff–high indifference.

Confusion about the insight gained in the Savikalpa samadhi or peak experience leading to ego-inflation

All samadhi experiences resulting from the exploration of any archetype gives you the surprise of basic "oneness of all-subject and all objects of experiences; the entire field of awareness seems to suddenly collapse into oneness. Quickly following this comes the mental and representations of the archetypal insight, along with conviction and a change of character, telling you the details of what needs to manifest in you next. In the absence of an experienced teacher, the surprise of the samadhi may be feigned, or the mental and vital message may easily be misunderstood and overestimated. Unfortunately, the spiritual psychology and literature including the modern version of transpersonal and depth psychologies are full of misconceptions as well. This is why we emphasize the present science-based approach which is subject to experimental and empirical verification.

Ego-inflated teachers get into scandals involving money, sex, and power, the vices of the unfulfilled survival-oriented needs of the first three chakras. Once again, this is due to the lack of adequate preparation.

Spiritual emergence misunderstood as spiritual emergency

In the eighties and nineties, thanks to Swami Muktananda, Swami Rama and many other gurus, spiritual seekers in America became interested in kundalini awakening, often for the wrong reason: glamour. If you could just touch somebody with a feather and the person starts making sounds of delight claiming wonderful flow of prana in his body, that is a feat worth having. And of course, some gurus were claiming that kundalini awakening is enlightenment, or at least a compulsory doorway to enlightenment. Lots of these seekers, with or without a teacher's guidance began practicing pranayama, martial arts, and chi gong to raise their kundalini. However, the emergence of sudden movement of prana in the body without knowing what it was, can be a experience-an harrowing emergency. This is one example of spiritual emergence being misunderstood as a psychological or spiritual emergency. (Although, undeniably, such experiences do produce uncomfortable mental and emotional states in some individuals).

Lack of cleaning up the personal unconscious producing violent imagery in creative visualization especially in association with drugs

Spiritual traditions are emphatic about cleaning up the personal unconscious; unfortunately, they put a moral spin on it calling it the cleaning up of impurity. Even Carl Jung²⁰ called this process shadow cleansing. However, much of the evil in us

comes as universal software at birth—the negative emotional and pleasure-reward-addiction circuits in the midbrain and cleaning that is not easy.

The real reason for the necessary cleaning up the personal unconscious of unneeded personal negative software is simple: we tend to be attached to some of these memories even though they harm us; we don't realize that even in deep sleep when there is no subject-object split, our unconscious has a tendency to process only the memory stuff and not new possibilities needed for a creative breakthrough. In outer creativity, this is ok for some people, some great geniuses especially, artists specially, because they are able to use the unclean shadows to express their creative insight if and when they have a creative breakthrough. Van Gough and Bosch are great examples.

For ordinary people though this can produce mental neurosis even temporary 'insanity'. Today, most psychologists recognize the need for "mental hygiene"—no moral connotation, and a good literature is rapidly becoming available.

Schizophrenia

This is perhaps the most serious danger that spiritual explorers face—going psychotic. The good news is a) this danger likely manifests only if one has a specific brain disorder consisting of producing extra noise whenever one is not paying attention and the brain is in low frequency theta

mode (3-7.5 HZ) that often produces drowsiness (read Willis Harman's book *Higher Creativity* for examples). This is not all bad: this is the characteristic that creative artists have to have in order to visualize vividly with the brain in the low frequency theta mode. However, for spiritual exploration, this can be hazardous.

We mentioned before that there are two passages of life when one hears the call of holotropy-drive toward unity--for exploring higher needs, one during the teen years, the other at midlife. Amit has discussed the teenage problem with schizophrenia elsewhere (read his book See the World as a Five Layer Cake). It is likely that the mechanism is the abovementioned genetic propensity plus a double bind that Bateson⁴⁹ first discovered: bad (according to the prevalent culture or in the judgment of a stern father figure) or 'mad' that we currently call psychotic.

For spiritual seekers of midlife transition, people get into the previously mentioned double-bind of whether to enter spiritual life or not perhaps because of the traditional misunderstanding that spiritual exploration involves "killing the ego" to begin with. See the double bind: if I do not enter, I have to continue without meaning and purpose; if I enter, I have to give up my ego and surrender to the unknown. Combine this with inadequate cleansing of the personal unconscious. And you can see why such mental health conditions can produce violent behavior.

Dark night of the Soul

If one does not have the brain disorder mentioned in item #8, the double bind above can lead to what traditions call the dark night of the soul, a persistent state of doubt and indecision which reason cannot resolve.

But great spiritual masters also mention the dark night of the soul arising from a deep yearning for God-realization after a glimpse of self-realization. This, in the interpretation of quantum psychology, is clearly seen as a part of the manifestation stage of inner creativity ending with the self-realization experience of Savikalpa samadhi. Dark night is the struggle to give up the ego to a large extent; the insight is clear: only then the no-self will reveal leading to God realization. If this is the case, no mental disease is happening needing psychotherapy.

Healing: The Quantum Science of Manifestation

In quantum psychology, we have developed a powerful ritual to initiate the healing process, including psychotherapy. We discussed how we all create our own reality in a previous section; in a certain real sense, this is true also for mental disease. Overall, this is connected with hylotropy consisting of sabotaging the movement of Consciousness toward holotropy. In this way, healing of a mental disease crucially

depends on reframing the patient's realitymaking using the quantum worldview.

The ritual of initiation into healing consists of intention setting, intention for healing. It consists of the coordinated use of the three I's: Inspiration, Intention, and Intuition. Inspiration is needed before intention setting in order to focus intention from an expanded Consciousness. Intention is a four-stage process:

- I intend for my healing
- I intend for my healing for the greater good as well
- Let my intention be in congruence with the purposive movement of Consciousness; this is the same as what used to be and is still called prayer
- Silence (meditation)

Silence ideally should lead to an intuition, but of course, initially it doesn't; only after some therapy, the intuition comes. The therapist may also choose to participate in a similar intention-making for his/her own healing, at a higher context perhaps, but don't doubt it. All healers choose the healing profession because they are into exploration of the archetype of wholeness.

The rest of the healing protocol is not ritualized, cannot be ritualized. It is the creative process. Instead of the conventional protocol of psychoanalysis where the therapist mostly listens, we suggest that the listening occasionally

make room for psychodynamics: imaginative active imagination and visualizations to create a plethora of divergent healing seeds that can sprout as expanding waves of possibility in the second stage of unconscious processing. At this stage, both the therapist and the patient meditate; the therapist may verbalize occasional guidance to maintain focus during this Be-phase.

When the healing intuition or insight will come cannot be predicted, but it comes; and it can come to either of the two, the patient or the therapist, it does not matter. In the manifestation stage, the therapy consists of using techniques psychodynamic or gestalt therapy to initiate a flow experience between the therapized and the therapist. The object manifestation is healing. New belief system, new character with conviction, new inspired motivation for creating a skill set to help lifestyle change.

In this way, psychoanalysis—quantum style—consists of 1) imagination and 2) Incubation in tandem, a series of do-be-do-be-do, until 3) Insight dawns followed by 4) Implementation of the insight gained as healing.

Altogether, this is a process consisting of an easy-to-remember 7 l's: Inspiration, Intention, Intuition, Imagination, Incubation, Insight, and Implementation.

See the Spiritual (a la Buddha) and Material psychologies as two exclusive limiting cases of Quantum Psychology

Let's recap. As early as 7000 years ago, Consciousness researchers in India, later venerated as rishis or seers, discovered that Consciousness is all there is by what they claimed as "direct experience." The seers designated Consciousness by the Sanskrit word Brahman; they divided the Brahman experience in two categories: 1) the subtler category of Brahman without qualifications, a Brahman that is impossible to talk about; and 2) Brahman with qualifications which they laid out succinctly as Sat-Chit-Ananda, three more Sanskrit words. Sat means existence; Chit stands for subject-object awareness, and Ananda stands for happiness coming from the boundaries expansion of the of Consciousness.

Almost concomitantly came the idea that Consciousness-the one and manifests itself as a Self-identity in the human being capable of four different experiences in four different domains: 1) the domain of matter where the objects are objects the of sensing, sensory experiences; 2) the domain of life or vitality where the objects are vital energy-prana in Sanskrit-that we feel; 3) the domain of the mind where the objects are thoughts that we think; 4) the domain of the archetypal objects called by the Sanskrit word *Vijnana*, the objects of the experience of intuition that gives us contexts higher

noble feelings such as love and higher thinking such as truth or justice. The seers also defined a fifth domain, 5) domain of *Ananda* where we can experience Consciousness in its qualified suchness of expansion--*ananda*.

If you are a psych professional in the materialist paradigm, you will have difficulty with this description of the scope of human experiences, especially, the experience of pure feeling, the experience of intuition, and the experience of ananda.

However, if you suspend your disbelief, there is the psychology of Carl Jung, sometimes called Jungian psychology, now-a-days part of depth psychologypsychology with emphasis on unconscious. Jung^{21,44,50,51} divided human personalities in four categories depending on how they process their experience primarily: 1) sensing personality who value sensing the most; 2) feeling personality, people who value feeling the most; 3) thinking personality, people who evaluate stimulus-response mostly thinking; and higher rarefied category of and 4) intuitive personality where intuition rules the response.

Jung does not mention anyone with a predominantly *ananda*-personality; this is understandable since his data is based on therapy-needing clients; people situated in *Ananda* do not need therapy.

What is the scope of the psychology that developed following these momentous

discoveries about Consciousness and its experiences? These seers pooh-poohed the ordinary ego personal-self experience as illusory; they sway the objective of human life as the penetration of these illusory experiences above. To confirm this denigration, they called each of the domains defined above by the Sanskrit word kosha, which means covering to hide Oneness. In this way, they defined the objective of the human life as penetration of all these coverings, even the one of Ananda-qualified Brahman. The goal is unqualified Consciousness. Millennia later, the great Buddha, and even later, Shankara, reaffirmed and clarified this view of spiritual psychology.

Obviously, this view is contrary to how most of us evaluate their experiences, then and now. It applies to a very narrow spectrum of people. Amazingly the philosopher Ken Wilber rekindled interest in this highly esoteric psychology by redefining the goal of transpersonal psychology in the same way contrary by the way with the intention of the originators of this branch.

Truth be told, the Indian Consciousness researchers themselves realized that a psychology defined this esoteric way has very limited applicability and devised another approach to Consciousness-based psychology called yoga psychology, a psychology based on the concept of qualified *Brahman*.

However, there is another difficulty for both these approaches to spiritual psychology. These researchers posited nondual Consciousness; but they never could demonstrate how the manifestation—dependent co-arising—really works. To this day, this problem psychologists of this ilk—primacy of Consciousness—have been unable to solve. Therefore, as a rule, they all end up denigrating the living experience of most people and limit the application of their psychology.

Perhaps this contributed to the eventual development of religion as a much confusing version of how to include the spiritual in human affairs. In religions, Consciousness—the one and only—is replaced by the concept of God. Oneness is not completely forgotten; God is omniscient, omnipotent, omnipresent, and all that. Think and you will see some remnant oneness.

However, make no mistake about it. God of religion is dualistic, separate from us. We are not that, we are not God. Some religions retain the archetypes but ritualize their exploration. All religions do retain the idea of archetypes as moral values living which we elevate our Consciousness and earn a place in heaven—God's abode. Some religions also introduced the concept of sin, moving away from morality for which people would be punished after death via the experience of the hell realm. Who decides where we go after passing? God does, on the judgment day. It is these

concepts, a judging God, heaven and hell that have given religions a bad wrap.

To summarize, esoteric spirituality is saying, the manifest world is of no importance, life's goal is to grin and bear it, and find your way to transcendence if you can. Religions say, grin and bear and be good, do good if you can. Either way, in these approaches, we have the spiritual counterpart of the conditioned limit in which the materialist psychology applies.

But of course, in this very limited view of the transpersonal adventures of a human being, we are basically separating the spiritual from the psychological. The consequences have been disastrous for the human societies and cultures.

The conditioned materialist view excludes spirituality completely, including the values. This too has had disastrous consequences.

Quantum psychology reaffirms the ontology of qualified nondualism and is able to solve the problem of how the oneness manifests as separate individual ego centred around and about the brain. And it is in this way quantum science has enormously improved the prospect of including the spiritual dimension of the human being in psychology. No, we don't need to be spiritual because of the fear of hell; we don't need to give up on worldly pleasures in order to have moral values in living our lives either.

In the foregoing, we mentioned people of hylotropy pursuing lower survival need and a smaller 15% of people of holotropy responding to higher needs. An important question is this: how come there are people with such disparate life needs at the same time? One reason that there is no set path of linear development of the human being is that there is a built-in monkey wrench in our science of development. Besides nature and nurture, there is a third factor of influence in human development—the reincarnational history which, according to quantum psychology, has both a beginning and an end. The newcomers, the naïve group, are guided by conditioning; they don't want to change. Gradually, with increasing maturity, people turn to the archetypes, explore them, and access new potentialities; this has given us civilization. At the very end of the developmental journey, some people develop a "high" indifference toward samsara that leads them to explore the self-archetype and eventually, liberation from the birth-deathrebirth cycle.

Αt the lower-need end. materialist cognitive-behavioral psychology, keeping the limited/old contexts is often adequate and should be looked upon as the conditioned limit of quantum psychology. However, CBT/REBT in some cases also requires creativity, mostly situational one. During the sessions, when the client is encouraged to come up with alternative rational thoughts for a given situation, it does provoke some amount of creative response, though limited by the flexibility of

the existing memory-repertoire. At the higher-need end, people explore the self-archetype as their final archetypal exploration to find total freedom. This is the freedom limit of quantum psychology.

The next Developmental group of professional people: Humanistic, existential-phenomenological, transpersonal (the original Maslow / Grof version) psychologies

Professions are as old as human societies. At some point of their re-incarnational history, people begin to hear the call of the archetypes—what Maslow called higher needs. However, the pursuits of survivalneeds still dominate these people and the earliest archetypal professions cater to the two—abundance and power—that are important to survive. In this way, we have the two highly competitive professions of business people and politicians.

Since society needs cooperation as well to hold together, the archetype of goodness also appears early on giving us the religious profession. One other old archetypal profession is art and music; the archetype is beauty. These two archetypes cater to our higher needs. Other archetypal professions make their appearance only with the advent of the era of the rational mind.

Today, we see people of all nine archetypal preoccupations among people. Unfortunately, the advent of imperialism, materialism and worldview polarization

have led to the concept of job; this has robbed people of the awareness of the archetype in the pursuit of their profession. In other words, today most people of professions also cater mostly to survival needs, and do not seek change.

Success in archetypal exploration needs creativity. Re-incarnational maturity eventually leads a substantial number of professionals to outer creativity in search of accomplishments. The motivation of name and fame, money and power, add to the motivation of their exploration.

Creativity requires a cooperation of the quantum self and the ego. There the psychological needs of these people (and to some extent the entire reservoir of all professionals) are best served by those branches of psychology that makes room for a self beyond ego. These branches are humanistic-existential/phenomenological, and transpersonal.

Humanistic psychology emerged as a result of psychology's attempt to include the human needs of the pursuit of new meaning and purpose; the latter leads to archetypes and human values.

Existential philosophy begins with the claim that existence precedes essence (the archetypes). If we become centred in the present moment instead of side-tracking toward living past memories and future projections, then eventually we will access the self beyond ego, the self of immediacy

where new potentialities of human development will become available.

This way of looking at existentialism is also the original spirit behind phenomenology; not get side-tracked by philosophy of the essence; instead, stay with what is the case.

Do the new potentialities belong to the hidden compartments of the human brain that only creative people are able to access or do they point us to new organizing principles such as the archetypes?

Psychologists of this ilk refuse to engage the worldview debate involving a direct clash with materialist science. Some of them subscribe to the philosophy of humanism—the existence of human values as an add-on to existential philosophy.

This worldview ambiguity opened the door to a materialism-friendly interpretation of existential philosophy that became popular. This is the one that the famous Jean Paul Sartre and Albert Camus subscribed to. Human values are pretend values. We have to pretend, otherwise civilization is impossible. This eventually led to the idea of politically correct behavior.

Eventually, phenomenologists such as Derrida also claimed that they have been able to debunk the idea of essence or archetypes altogether.

Can quantum psychology be used in the limit of humanistic-existential paradigm and rescue the original spirit of this approach?

Yes, it can. These approaches thus remain useful for a substantial number of avantgarde people of post-materialist agenda who want to explore archetypes and creativity without breaking with existing science. The advantage is that then all the therapies developed by the practitioners of this branch of psychology can be used to provide psychological help for these professionals constituting a significant number of the adult population everywhere, powerful therapies such psychodynamics and gestalt therapy. At the same time, quantum psychology properly shows you the limitations of this approach very clearly and can be invoked whenever such limitations are encountered.

The psychology of Transformation: Yoga Psychology, Transpersonal Psychology, and Depth Psychology are all precursors of Quantum Psychology

Yoga psychology, when properly interpreted, is the psychology of soul-making. As such its ideas can be unambiguously understood only upon using quantum science.

Transpersonal psychology became highly esoteric in the Wilber version, but if we naturally expand the original version of Maslow and Grof to transformation and soul development as proposed in the work of Roger Walsh⁵², James Hillman^{41,42}, Jean Shinoda Bolen^{45,46}, and others, it remains a powerful force in the psychology of

transformation and makes sense only upon the explicit adaptation to quantum psychology.

In this spirit, transpersonal psychology fits well with yoga (yoga means integration in this context) psychology, the psychology developed in India in the Bhagavad Gita^{36,37}, in Patanjali's yoga Sutra, and brought into a new focus—integral yoga—developed by Sri Aurobindo. As already mentioned, a similar brand of yoga psychology is found in Jesus' Gospel according to Thomas⁵³.

The only thing missing in this approach is explicit reference to the unconscious.

In this way, transpersonal and yoga psychologies are an approximation of quantum psychology in the limit when we leave all references to the unconscious (domain of potentiality) implicit. If we use meditation alone consciously and leave the rest of the creative process as implicit, this works except with much reduced efficiency. Since creative any engagement necessitates a protracted use of the creative process that includes unconscious processing, obviously using the full force of the quantum is wiser.

Depth Psychology is the closest precursor of Quantum Psychology

Freud^{6,7,7} gave us the psychology of the personal unconscious in the beginning of the twentieth century and was immediately followed by Carl Jung¹⁹ who generalized Freud's concept of the unconscious with

the idea of a shared collective unconscious of humanity, consisting of humanity's collective memory.

More recently, the psychologist Roberto Assagioli^{23,24} was looking for an unconscious source for the superconscious experiences of transpersonal nature (the peak experiences). He intuited the concept of a higher unconscious as such a source.

In quantum psychology, the higher unconscious is the new (meaning and feeling) and forever-new (the archetypes) possibilities of Consciousness that we call the quantum unconscious of previously unmanifest possibilities with no pre-existing memories—personal or collective.

Depth psychology is more than the psychology of the unconscious. Beginning with Freud, the psychoanalytic tradition has perhaps given us the most complete rendition of the ego with the subconscious Id and the unconscious super-ego (which includes the moral dimension of religious psychologies). Agreed that the discovery of the negative emotional brain circuits has made the concept of the evil *Id* somewhat less imposing; however, the personal negative emotional software that we build using partly the universal software and partly new potentialities of movement of Consciousness, Id is still a powerful concept.

In addition to the concept of collective unconscious, Carl Jung introduced the four types of psychological experiences of the psyche. Additionally, he also introduced the concept of synchronicity, a precursor of the psycho-physical parallelism that we use in quantum psychology.

Jung¹⁹ discovered images or representations of the Platonic archetypes in his explorations of the collective unconscious, mainly those of the self-archetype. James Hillman^{41,42} revived the idea of gods and goddesses as such representation in the collective unconscious for all the other archetypes.

Finally, Roberto Assagioli^{23,24} and Haridas Chaudhuri⁵⁴ (according to a report about his unpublished work, read Bahman Shirazi's article "Integral Psychology—psychology of the whole human being" in Schulz et al [ed.] book *Consciousness and Healing*) even intuited the existence of a higher quantum unconscious where from the new potentialities of creative manifestation come.

There are still many conceptual gaps in depth psychology that prevent its integration with the other branches. Quantum psychology fills in these gaps and opens the door to one integral psychology.

In this way, quantum psychology is the most advanced scientific version of depth psychology; there is no need for psych professionals to pursue depth psychology as a separate enterprise. (Of course, quantum psychology still needs to develop in detail the concepts around defence mechanisms and personalities; we are in

the process of developing this and will report the results in a separate publication).

The Question of Human Development

Human development starts with quantum self with feelings as the only cognitive mode until about the age of 1 year; here the Piagetian theory of the development of sensory-vital software is quite adequate. but there are other unresolved questions, the most important is the question of the relationship with the mother and to a lesser extent that with the father. Attachment theories do provide ideas, suggestions and conceptualization already in this area. Quantum Psychology can easilv incorporate some of these ideas. This will be the subject of a future publication as well.

At about age 1, with the beginning of mental cognition, children develop a sense of self, albeit pre-ego. Quantum self and feelings in the body still dominate the more spontaneous behavior. However, in the absence of mental programs and memory sequencing circuits, no soul-software can be made from these experiences.

Here some spiritual psychologists and in modern times Carl Jung sometimes sound overly presumptive of the glory of children's states of being. For example, how do we evaluate the adage, the spiritual advice, "Be you like children?" It is interpreted as the theory that children are already spiritual; with ego-development we lose it, and the job of adult spirituality is to gain the

child-like spirituality back. Ken Wilber calls this kind of claim that adult spirituality is a regression to childhood, the pre-trans fallacy. But is it a total fallacy?

First of all, when a spiritual teacher like Jesus tells us to be like children, he doesn't mean regression wholly to childhood. He means, be present-centred like children are. Be more in your heart like children are and less in your mind remembering the past and weaving the future.

There is also a second most important omission in all modern psychological theories of development. They do not account for the effect of reincarnational nonlocal memory on our development. Quantum psychology explains reincarnation and, in this way, gives psychology the very important idea that child development is shaped not only by nature and nurture but also by reincarnational inheritance.

And here is why we cannot even say that child development is a linear, predictable stage-by-stage process. Reincarnation memory surfaces unpredictably in children at various ages, sometimes even in adulthood acting as a monkey wrench in all linear theories introducing unpredictability.

We can adopt the following strategies. One is to accept heterogeneity; homogeneity is for machines. The second is to accept that different children will learn at different rates depending on the parents, the teachers, the timing of the trigger for the surfacing of

reincarnational inheritance, even brain development. The third is that mental development does not preclude the vital connection. The development of mental software takes place simultaneously with the development of emotional development of vital-mental software and that can include positive emotional software. Fourth, if we are careful, we can keep the quantum-self access in children continue entire development through the adulthood and balance creativity and conditioning in both feeling and thinking. Similarly, fifth, we can also allow children to respond to both sensory and extrasensory stimuli, that is intuition and prevent outerinner dichotomy and instead, balance the inner and the outer. Finally, sixth, in the teenage years when sexual development takes place, we can pay attention to feelings in the body and teach teenagers to balance the chakras.

In this way, instead of guiding child development according to pre-set stages, we can only lay out the factors via which we can optimize the situation with every child taken as a unique individual. That is the child's privilege of being human.

This needs new thinking about parenting and childhood education. This means we better forget much of the dogma that Piagetian educators claim about the stages of mental development, all that prepersonal (also called pre-operational), concrete operational, and formal

operational stages of the development of mental programs.

Psychotherapy

Child development does affect the adult ego. This is undeniably true. Childhood traumas undeniably produce repressed memories, for example. The challenges and preoccupations of childhood produce brain-mind defects such as mental inertia, hyperactive, and intellectual tendencies. The way human adults develop right now, invariably there would be the three fundamental dichotomies—creativity-conditioning, inner-outer, and male-female.

For some people today, excessive information processing via the Internet and social media has produced a dumbing down effect. A few of these people do wake up to their higher needs of meaning and purpose of life, but they need help. Who but the psychotherapist to help them? In the olden days some moral education did take place and moral development led to such software as conceptualized as Freudian superego; but now all that is much in question for many people due to an overall moral ambiguity in our societies.

So today, roughly 80%-85% of people suffer from the base-level human condition. Their ego-identity is saddled by:

- Me-centeredness
- Dumbing down effect due to excessive information processing
- Negative emotional brain circuits the independence of the mid or

- limbic brain negative emotional brain response from cortical thinking
- Pleasure-centeredness part due to the brain circuits of pleasure and reward, part due to the addiction circuits

Add to this the already mentioned role of trauma and mental defences, and what we can identify as brain-mind doshas and the three fundamental dichotomies, and you have a handful of therapeutic problems. In an earlier time, Maslow estimated that about 5% of all people can be considered to be mentally ill in the clinical sense and another 5% have positive mental health. The rest, about 90% of people are "normal."

But what is normal? In actuality, normal people suffer from bouts of "neurosis," due to their base-level condition alone. In traditional olden day human societies, we lived in extended families; in case of occasional bouts of neurosis, the family took care of а person's lack psychological well being by providing the needed attention and therapy. However, with the advent of nuclear families and both adult partners working, family help is no longer much available. In this way, today, the concept of mental health and normality must be broadened.

Mental health is wellbeing of the psyche and that includes emotional, mental, and spiritual. When one is suffering from an occasional emotional - mental derangement, she goes to a therapist; and the therapist gives her a treatment—cognitive-behavioural or supportive of stress management therapies, or brief psychodynamic psychotherapy, hers to choose. The therapy takes care of the patient's illness momentarily.

If the source of the illness is one of coping with a new temporary situation, then either cognitive-behavioural or psychoanalytic therapy will work to make minor adjustments of the existing mental-emotional software.

If, however, the situation is a long-term environmental challenge, trauma, or a dosha-related lifestyle issue and/or the source of suffering is lack of attention to higher needs including the spiritual, the mental disease will recur, and in the absence of long-term treatment that addresses both mental-emotional and the spiritual, the illness will become chronic. Eventually, the person will become mentally ill in the clinical sense.

In this way, the current situation of mental health is very much like that of physical disease and allopathic treatment (that is, a use of exclusive allopathic medication without sincere lifestyle changes inclusion), thereof. If the source of the disease is physical, allopathic short-term treatment will work; if not, then alternative medicine and lifestyle modification—taking care of the vital, the mental, and the spiritual will

become important. Read Amit's book, *The Quantum Doctor*.

In this way, as in physical health, so it is in psychotherapy: we cannot separate physical, psychological, and spiritual entirely.

We need to change our healing mind-set from disease-centeredness to health centeredness; you can call it preventive psychotherapy if you wish. Taoist psychology gives us the basic recipe. Maintain a balance between yin-potentiality—and yang—actuality. This is part of that balancing of creativity-conditioning fundamental dichotomy.

In this way, from a mental health maintenance point of view, from the beginning, we need to integrate the cognitive-behavioural and psychoanalytic approaches with the humanistic existential approach.

And then there is that 15% of human population that is quite awakened to their higher needs. A safe assumption is that they are "old" souls from a reincarnational perspective. While others (the 85%) are stuck with the development of only the mental side of the ego and moral confusion, this 15% very likely will have developed enough positive emotional brain circuits to keep negative emotions partly at bay. This group will avoid much of the moral morass of today's society as well.

What we cannot predict is when, at what age, will these people wake up to the need

of transformation? Empirically, there seems to be two important periods of human life when this transition is most likely to occur. One is the teenage years, 12 through nineteen, the period of awakening of sexuality. The other is vaguely called the period of midlife transition, roughly from age 35-55.

There is important data here to consider. The teenage suicide rate is at an all-time high today, and depression is rampant as well for teenagers. Both data suggest a mental health crisis. It is finally becoming common wisdom that a crisis presents both danger and opportunity. The danger is the likelihood of suicide and depression; the opportunity is one of growth, a transition from the current egoic pursuits to the pursuit of higher needs of meaning and purpose.

The psychotherapy professionals must develop sensitivity to these two age groups and be able to recognize the crisis in their clients. The question then is the optimal way to address the higher needs of these populations.

Let not the percentage numbers deceive you. Fifteen percent of seven and a half billion people of the planet constitute a whopping one billion or so people. Moreover, from a socio-cultural point of view, let's face it; our society has been elitist and will continue to be elitist for quite some time in the future. Therefore, the mental health needs of this group are very

important to address if we want social change in a hurry. These are the people who will provide the leadership for social change.

The problem of psychotherapy for this group is quite different than the first group. This requires an integrative approach from the get-go. As already mentioned, such integration has led to depth transpersonal psychologies, and even an integration of the last two has begun. However, the complete integration requires the integrative principles of quantum science. What is imperative now is to carry forth this quantum integration of the psychologies and apply it to psychotherapy and mental health.

Transformational psychotherapy in the Quantum Style

In an earlier book, Amit and the psychologist Sunita Pattani⁵⁵ developed a scale of happiness as part of a formulation of quantum psychology. Roughly, psychotic patients belong to happiness level zero; neurotics to happiness level 1, normal people to happiness level 2- to an unstable 2; and positive mental health to a stable 2 to 2+. These people belong to the first group mentioned above.

Once one achieves 2⁺, transformation is a possibility. What provides the motivation? Grof suggests that the drive toward psychological differentiation, call it hylotropy, that produces the normal adult ego is not the only story; there is another

psychological drive, Grof⁴⁷ calls it holotropy; this is drive toward integration and wholeness.

The drive of holotropy is a drive for transformation from the positive side. It manifests as curiosity, even a yearning for awakening to the soul level of being.

There is, however, another path, via negative, which has been more dominant in the past continuing through the present. This is the path of psychological suffering. For dumbed down people of the latter teens, this may express an intense need for meaning and purpose in life; if not met then this may lead to depression and suicide. If such a person per chance seeks therapy, here is the therapist's prerogative to point out the opportunity for transformation that the meaning crisis represents and provide therapeutic help not only to lift the client's depression but also guide him transformation.

For societally "successful" people in their thirties, forties, and fifties, it is the midlife crisis that opens the opportunity for change. For many women, the situation is often like this: "the children have left home, the husband has divorced me, and even my pet dog has died." The crisis becomes a curiosity because she sees a clear opportunity to exercise her freedom in pursuing а new life focused on transformation.

For successful men, it is dissatisfaction with the professional pursuit that now

produces depression; empirical data indicates high suicide rate for this group as well when they encounter mid-life crisis. For these people the path of transformation is once again via negative. These people need psychotherapy for lifting from a depression mind-set to a transformational mindset.

Of course, there will be many cases of crossover; in actuality, both men and women come out of midlife crisis using both paths—positive or negative--as appropriate.

And of course, we should remember that the vast majority of people do not make lifestyle change when mid-life crisis hits them; they do not experience much of the severity of the crisis and deal with it by making minor changes with the standard therapies or even no therapy at all. Instead of using the opportunity for transformation, they "reconstruct" their memory to give it a positive spin.

What does the necessary transformational journey entail? Well first of all, the scaling of the ladder of happiness beyond level 2 using inner creativity and quantum leaps. This leads to not only developing new higher software of living but also the required intelligence—the spontaneous ability—this is what character is about—to use the software. The higher levels of happiness engage the quantum principle of tangled hierarchy as well. Read Goswami and Onisor's upcoming book *The*

Awakening of Intelligence for the details of soul-making.

Persona and Quantum Psychotherapy

In the existing paper that we are reviewing, the idea of persona (masks) is not addressed in detail. But of course. personality is an important factor in the encounter during the therapy process. These ego-patterns of masks being worn become a significant hurdle for an authentic ego character to be revealed to the person undergoing therapy. There appears to be the conscious defence patterns for somewhere a part of them does know their presence but cannot gather enough courage to drop them off as underlying ego-character optimum functioning at lower survivalrelated identities. In many therapeutic scenarios, supportive unfolding of those masks with simultaneous strengthening of ego-character patterns of optimum functioning at root, sex and naval can be a useful recovery stream.

Defence Mechanisms, their recognition and building up of healthy egostructures in relation to first three chakras

Denial, projection and rationalization (apart from the most unconscious one - repression) are the common defence mechanisms encountered during therapy sessions. Underlying such defences are the ego-persona structures that developed due to the lack of appropriate healthy

nurturing in the first place. They need to be addressed before soul-making transformative journey could even be started.

Of course, these people do get glimpses of higher self and the possibilities of becoming a transformed. However, unless the defences are consciously recognized and healthily embraced and the egostructures are optimally strengthened, they cannot move substantially to levels in healing and recovery.

Quantum psychology and psychotherapy, with their explicit recognition of feelings as movements of vital energies at various chakra points and integration of energy psychology concepts provides one of the effective avenues in building up healthy ego-personality structures that can support in minimizing those defences.

Explicit integration of the creative process

Going beyond humanistic and transpersonal schools of psychology and therapies where the potentialities of human beings and the selves beyond survival-based me-centred ego are merely recognized, quantum psychology and psychotherapy explicitly include creative process in therapeutic streams.

Supportive behavioural and 'first-order' cognitive therapy can facilitate the needed change by forming new habits or alternate thinking within the fixed context and using rational cognitive processes. For the

problems which are long standing, if the person already has holotropic drive, explicitly incorporating creative process is therapeutically more effective.

Quantum science makes it clear that unless the creative process is invoked, the person tends to actualize only previously collapsed possibilities and permutations and combinations at best. Only when preparation followed by incubation is proactively approached in tandem (do-be-do-be-do), a person is properly ready to receive the creative insight. Following the insight, the properly nurtured ego which is built during the process of various lower chakra optimizing therapy sessions of energy psychology collaborates with quantum leap experiences of the quantum self towards making new stations of character that we call the soul.

The therapist first needs to know and feel convinced that a major transformational shift is possible only through such a process. Then only with conviction the therapist can convey the same message to his or her client and get result. With tangled hierarchy established, with preparation and incubation phases actually employed during therapy sessions, both the client and therapist achieve readiness to receive the needed creative insight (see later).

The Training of a transformational Quantum Psychotherapist

Even transpersonal psychologists⁵⁶ acknowledge the fact that psychotherapy at this higher need level of people's exploration of higher states of homeostasis (the soul levels) will require the healer to engage both therapy and teaching because belief system reframing is a major component of the healing.

In quantum psychology, the integrative transformational education that leads and guides you in a transformation journey to wholeness we call quantum yoga—an integration of all earlier yoga's, all dichotomies, the nutrition of all five "bodies" of the human being, the awakening of character and intelligence, and the powers of quantum healing at all levels.

The quantum psychotherapist needs to guide his client through happiness level 3 and sometimes, in rare cases, even higher. This may require intense collaborative efforts in quantum healing of the client that requires the client-therapist relationship to involve the practice of tangled hierarchy.

Tangled Hierarchy and Quantum Psychotherapy

One of the critical aspects that needs to be highlighted from the quantum science worldview perspective for psychotherapy is the role of tangled hierarchy. In many traditional therapeutic practices, transference and countertransference are viewed sometimes with 'too-much'

attention and keeping emotional distance from those who are therapized is usually prioritized.

the Tangled hierarchy is one of foundational ideas in quantum science, and when established between a sensitive, mature, and expert therapist (who has achieved some emotional intelligence) and the client who is ready for the journey of quantum leaps and has developed trust for the therapist, it can definitely be one of the most healing promoting components of therapeutic dynamics. Tangled hierarchy creates a dynamic space, so to speak, in which the necessary exchange of needed therapeutic elements (higher meanings, noble feelings, glimpses of intuitive objects) can occur more effectively.

Further Research

What we have sketched above is a science in progress. Much research needs to be done especially the in area of psychotherapy as well as developmental where psychology most of psychological issues are rooted. Below we briefly list some of the areas of major concern.

Women's psychotherapy: Period of pregnancy, postpartum and perimenopause, male-female difference, and other issues

Along with teenage period and mid-life crisis, major hormonal shifts occurring in

women during pregnancy, postpartum and during peri-menopausal period need to be taken into our paper and write something about it too.

Change in major hormonal milieu in women's lives during those periods does produce sensitivity towards life circumstances and events, and the change in their lives due to a new child coming is definitely stressful for one's internal system to deal with (though the joy of becoming mother needs not completely be ignored here).

Aside from male-female dichotomy, there is a genuine difference between women's and men's processing of thoughts and emotions and that, too, has to be accounted for in personality development. All these issues will be the subject of a future publication.

Specific therapy for diseases like ADHD, Depression, Bipolar disorder, and Schizophrenia

This is another subject of our ongoing research. The reader should take our comments about specific diseases, especially psychosis, as tentative.

Hyperactivity is one of the facets of ADHD and many exhibit (including adults) the other facet of just inattention (attention deficits). In these cases, the data does indicate that the areas in the brain responsible for keeping the attention and focus on the tasks at hand seem not to be cooperating well with the person involved.

For some of them, they even have the capability of focusing well, provided the activities they are participating in are of their passionate interests - for example a favourite sport. Also, it is not that they are bombarded with overuse of 'rajas' driven by a rush of creative inputs and they jump from one to another. Instead, they tend to have difficulties even with routine and mundane tasks.

Too much of (uncontrolled) 'rajas' driven flood of creative input (within the limit of situational creativity) and associated passionate behavioral activities could be an [tentative] explanation for increased goal-directed activities and grandiose talks/behaviors for hypomanic to manic episodes in bipolar mood disorder. Lack of meaning due to increased dumbing down effect of too much information-processing is really significant. But whether it is the major cause leading to depression or is the reflection of escaping from feeling depressive emotions needs to be further researched.

For schizophrenia, we feel that Bateson's⁴⁹ double bind theory does have some validity although current biological view does not give it much importance these days. Having said that, we do acknowledge that the biopsychosocial model for schizophrenia still has its presence and validity.

Two major cornerstones in schizophrenia phenomenology are 1) the commonly

known perceptual disturbances presenting as hallucination with or without insight usually the insight is not expected during an acute psychotic episode and 2) distorted thinking in the form of delusions - bizarre in cases. Nevertheless. some schizophrenics present disorganised behavior and speech where they mostly appear as 'mad' to non-professional people. Yes, genetic vulnerability makes their brains kind of 'sensitive' to the emotional load of stressful life events (including the double bind). Such sensitivity could be producing too much of brain noise for those brains, and at the same time some missing pieces of healthy egostructure could be adding for them to end up having experiences of psychosis hallucination and delusion. Too much chaos in the brain then fails to organise their behavior and speech also.

However, further research is clearly called for.

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