



An Integral Tour of Consciousness Studies

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Consciousness is not only found in the Upper-Left quadrant in Integral Theory, which concerns itself with individual subjectivity and experience; rather consciousness is located in each of the four quadrants. This short essay examines how consciousness reveals itself and is studied in each of the four quadrants within Integral Theory.

Introduction

Beginning with the original publication of his landmark book, *Sex, Ecology, Spirituality: The Spirit of Evolution*, Ken Wilber has argued for an organization of knowledge into four broad categories. These categories can be graphically represented as four quadrants within a square grid. Each of the quadrants stands for a perspective which consciousness can take or a broad category of knowledge; one might say a realm of reality. The Upper-Left (UL) quadrant concerns internal or subjective knowledge (“I”), while the quadrant on the Lower Left (LL) concerns interpersonal and cultural knowledge (“We”). The Upper-Right (UR) quadrant includes objective knowledge about individual objects or things (“It”), and the Lower Right (LR) concerns interobjective knowledge about groups of objects and their behaviors, including social systems and ecologies (“Its”). Moreover, the methods used to obtain the knowledge in each quadrant are different. These are described briefly, further on.

On examining figure 1, we see that the left two quadrants are about subjective and interpersonal realities while the right two quadrants are about objective realities in the form of objects and collectives. Similarly, the two upper quadrants encompass individual experience and single objects, while the lower two quadrants incorporate shared experience, collectives, and networks (see figure 1).

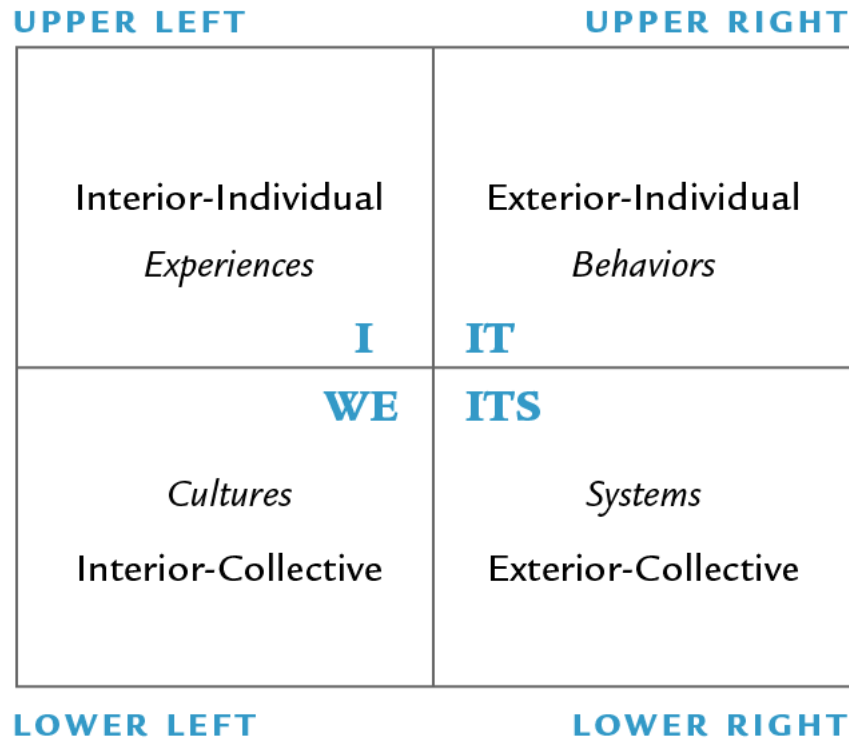


Figure 1. The Four Quadrants

Within each quadrant we find levels of development, complexity, and/or evolution. In other words, each quadrant is an arena for growth and development, as well as for evolution. For example, the study of growth of the brain from infancy through adulthood, a topic for the UR quadrant, discloses the emergence of newer and more complex bio-chemical structures, such as the growth of the neocortex over time. This path of development mirrors the longer story of the evolution and complexification of the brain over the course of biological evolution. Similarly, other quadrants display stages of development as well as evolution. For example, the LR quadrant maps the evolution of social systems from hunting and gathering societies through ancient city and nation states, and on to modern corporate nations. The LL quadrant highlights the complexification of meaning and value systems within communities that correspond to the social structures in the LR quadrant. Examples of these include various stages of conservative traditionalism, competitive innovation, cultural diversity, and global cooperation. In like fashion,



we find developmental and evolutionary changes in the UL quadrant that represent stages in the development of consciousness itself, and the structure of the psychological self. Given the comprehensive nature of the four quadrants and their respective levels, it would appear that virtually all human knowledge is included in the AQAL (all-quadrant, all-level) matrix of Integral Theory.

Consciousness

Initially it might appear that consciousness is found only in the UL quadrant. After all, this is the quadrant of personal subjectivity. If, however, we examine each of the four quadrants while keeping in mind the topic of consciousness, we discover that it cannot be contained in any one specifically, nor can it be restricted to one side of the AQAL diagram. This article provides a short tour of the four quadrants, highlighting some of the forms that consciousness takes in each, associated disciplines, and the methods used to study it from that perspective. This is not an extensive examination, touching only lightly on the rich developmental latticework found in each quadrant and leaving much complexity (horizontal and vertical) for future explorations and explication.

On this brief tour we point out three aspects for each quadrant: the first is the *content* of the quadrant in terms of consciousness; the second involves associated *disciplines* of study and research; and the third examines some of the *methodologies* by which this content is studied by these disciplines. After examining these aspects within each quadrant we will offer a few closing reflections on the importance of taking an Integral approach to consciousness studies.

Upper-Left Quadrant: Subjectivity

The Upper-Left quadrant of consciousness is concerned with the content of *subjective experience*, which is presented through first-person descriptions, “I” language. These descriptions respond to the question: how is consciousness experienced? Some disciplines that



explore consciousness from a first-person perspective include: somatics, psychology, art, poetry, and music. Consciousness from this quadrant has most often been studied by the method of *introspection*, or self-reflection. There are a number of types of introspection, but one of the most productive is the informal, but careful, self-reflective examination of experience carried out a century ago by William James. James built what may well be the richest and most detailed psychology of ordinary as well as extraordinary experience ever recorded.

A more formal way of conducting introspective investigations, known as phenomenology, was developed by the German mathematician turned philosopher, Edmund Husserl, a contemporary of James. Husserl's emphases on "bracketing" each aspect of experience under examination by holding it separate from any distracting surroundings—thus decontextualizing it—added a degree of objectivity to the process, and set the foundation for more recent work in phenomenological philosophy and psychology. His student, Martin Heidegger, carried such investigations even further, establishing a tradition that continued through Jean Paul Sartre, M. Merleau-Ponty, and other modern phenomenologists.

Contemplatives such as Sri Aurobindo and Meister Eckhart have for millennia practiced deep, reflective meditation, observing their own inner processes and reporting them. Their tool for introspection was the quiet, concentrated mind used for contemplative inquiry. Their numbers include the great contemplatives of both the East and the West, and their writings fill libraries. These are the sacred texts of the world.

Other approaches to understanding the nature of conscious experience include the exploration of whole structures of consciousness which represent broad landscapes of experience. For example, during the mid-twentieth century, the European poet and cultural historian, Jean Gebser, described several forms of consciousness that apparently had dominated human experience during overlapping, but identifiable, historical epochs. These include an archaic, magical, mythic, mental, and an emerging integral structure of consciousness. Gebser's scholarship has



influenced Ken Wilber's work as well as ours. His methods were literary and historical. Many of Gebser's writings, while widely available in German, are limited in English to the excellent translation of his combined volumes, *The Ever-Present Origin*.

Interestingly, the great twentieth-century yogi and philosopher, Sri Aurobindo, also described a series of structures of consciousness that unfold with the practice of his *integral yoga*, and which he referred to as a *hierarchy of mind*.¹ Ken Wilber and Combs have demonstrated that this hierarchy corresponds to developmental stages seen in individuals as well as in civilizations.²

Many other topics are found in this quadrant as well. These include the various forms of psychotherapy that emphasize subjective self-examination such as *focusing*.³ Moreover, the whole study of the development of the psychological sense of self also belongs in the UL quadrant. Carried out through a wide variety of psychological methodologies (e.g., dream journaling, creative expression), all rest on self-reflection in one form or another. Wilber has written at length on this topic, as have many other self theorists.⁴



Content: Subjective Experience

First-Person Descriptions of
Consciousness

How is consciousness experienced?

Some Disciplines:

Psychology, Art, Poetry, Music

Some Methods:

James' Introspection

Husserl's Phenomenology

Gebser's structures of consciousness

Contemplative inquiry

Meditation practices

Sri Aurobindo's Integral Yoga

Psychotherapy

Gendlin's Focusing

Dream journaling

Creative expression

Self-Reflection

Figure 2. Examples of Content, Disciplines, and Methods of Consciousness in the Upper-Left Quadrant

Lower-Left Quadrant: Intersubjectivity

The Lower-Left quadrant of consciousness concerns the content of *intersubjective culture* presented through second-person (and first-person plural) descriptions: “You/We” language. These descriptions explore the question: how is consciousness shared between individuals? A number of disciplines explore consciousness from a second-person perspective including: ethics, philosophy, anthropology, literature, and religious studies.

This realm of intersubjectivity is often overlooked, despite the fact that there is much rich knowledge and theory associated with this quadrant. A fortunate exception is the study of value systems that correspond to each developmental stage, or structure, in the UL quadrant. These value systems have been described by numerous researchers using standard social science methods, but nowhere more dramatically than in the work of psychologist Clare Graves, who



conducted pioneering exploratory research in the 1960s, followed by contemporary psychologists and social theorists Don Beck and Christopher Cowan.⁵ Influenced by Graves' research, Beck and Cowan developed a model called *Spiral Dynamics*, which shows how the value systems of individuals and societies shift and change from level to level as consciousness develops. Their model is consistent with the developmental structures of consciousness seen in the UL quadrant. For example, Gebser's *mythic* structure of consciousness corresponds to Spiral Dynamics' "Blue" *mythic-order* value system, in which conservative mythic beliefs and rituals dominate human behavior. In the modern world these values control people through religious and governmental institutions. Gebser's *mental* structure corresponds to Spiral Dynamics' "Orange" *scientific-rational* value structure. Here, competition, self-advancement, and scientific progress triumph over traditional values and time-honored rituals. In the same vein, we might note that Jean Gebser's own scholarship was so grounded in the study of cultural history that his structures of consciousness are sometimes placed in the LL quadrant.

The aspect of the LL quadrant that deserves much more attention than it usually receives is intersubjectivity itself: the feeling of what it is like to be in relationship with one or more others. There is plenty of work in the UL quadrant on what it is like to be yourself, but for the most part it's left to poets and musicians to explore the experiential lives we share together. There are, however, exceptions. Psychotherapists have described shared feelings in therapeutic interactions, and some have written about their implications, especially in the context of *empathy*, an important form of intersubjectivity.⁶ *Compassion* is another important constituent of this quadrant. There are entire literatures on compassion within the spiritual traditions, perhaps most prominently in Buddhism where it is emphasized as a central theme and cultivated through such practices as *tonglen* (taking and sending).⁷ However, many other traditions emphasize the importance of compassion. For instance, the Quran reports that the Prophet advises us to be compassionate to others so that we may be granted compassion by God.⁸



Ken Wilber has written at some length about intersubjectivity, including the importance of the intersubjective web that holds together culture, society, and persons. Hargens has examined this work in detail.⁹ We also would especially recommend Wilber's forthcoming volume two of the Kosmos series, tentatively titled *Kosmic Karma and Creativity*.

One master of LL theory was the Israeli philosopher Martin Buber. His classic book, *I and Thou*, was powerfully influential in existential and humanistic psychology in the 1960s, and continues to shape contemporary psychotherapy and coaching. His ostensible method was that of philosophical exposition but it thinly covers deep introspective insight. For example, consider his statement: "The *I* of the basic word *I-you* is different from that in the basic word *I-it*," meaning that we are different beings when we are in relationship with another living being than when we are in relationship with an object. Important relationships often involve other human beings, but can also be with nature, or even with the divine. Another way of accessing these important relationships is through Socratic dialogue, which reveals the texture of intersubjectivity through philosophical inquiries.

Still, there is much yet to say about intersubjectivity. For example, how does the quality of intersubjectivity change with the different developmental structures of consciousness mentioned above? It seems the West has been so busy celebrating the individual that the shared space between people has been largely ignored, especially in academic and intellectual circles. The East, on the other hand, is so dedicated to the values of community that their spiritual strivings often seek refreshment in more individualistic values. Upon his death, the Buddha, for example, admonished his followers to each seek his or her own individual salvation. Neither the East nor the West has done this quadrant full justice.

In a different vein, we also might note that postmodernism, building on Heidegger's hermeneutics, is an attempt to delve into background contexts and intersubjective structures, particularly of the linguistic type. Qualitative research in anthropology has been deeply



influenced by hermeneutics and has developed many participant-observer techniques for exploring cultural spaces. Both structuralism and post-structuralism utilize the Lower-Left quadrant as a primary area of study and investigation. Foucault's neo-structuralism, in particular, examined modes of discourse, and found them to be historically stratified. However, the general conclusion of all postmodernism is that culture is a mediating factor in all knowledge, which means the Lower-Left dimension is inescapable.

Content: Intersubjective Culture

Second-Person Descriptions of Consciousness

How is consciousness shared between individuals?

Some Disciplines:
Ethics, Philosophy, Anthropology, Literature, Religious Studies

Some Methods:
Spiral Dynamics value meme analysis
Empathic resonance
Cultivating spiritual compassion
Buber's I-Thou exposition
Socratic Dialogue
Heidegger's hermeneutics
Participant-observer techniques
Foucault's Neo-structuralism

Figure 3. Examples of Content, Disciplines, and Methods of Consciousness in the Lower-Left Quadrant

Upper-Right Quadrant: Objectivity

The Upper-Right quadrant of consciousness is concerned with the content of *objective behavior*, which is presented through third-person singular descriptions: "It" language. These descriptions explore the question: how is consciousness anchored in physicality? There are a number of disciplines that can be used to explore consciousness from a third-person perspective such as:



physics, chemistry, biology, cognitive science, psychiatry, and bodywork. Since the UR quadrant represents the objective, publicly observable world, the methods used to investigate it are objective as well. These include the whole apparatus of scientific investigation, with experimental methods, laboratory experiments, observation, chemical analysis, surveys, correlational studies, field investigations, and so on.

The Upper-Right quadrant includes a spectrum of topics concerned with the influence of consciousness on the body, and the influence of the body on consciousness. Thus, it embraces much of holistic health, as well as various body-mind therapies ranging from Rolfing, a method that works with the myofacial tissue of the body and has powerful psychological effects, to Network Chiropractic, which seems to work as much with consciousness and subtle energies as with the physical body itself. Other body practices such as massage and yoga can be used to explore the interface of consciousness with physicality. Finally, after 300 years, the influence of René Descartes' philosophy of mind-body *dualism* (an important advancement for its time!) is on the wane, and scientists, physicians, psychotherapists, and ordinary people are discovering the reality of an integrated mind and body.

One small but fascinating aspect of this newly re-discovered integration is the exploration of how activity in the nervous system, and particularly the brain, reflects different states of consciousness. Many methods, such as the analysis of neurotransmitters and the use of prescription drugs, have revealed many interesting findings about consciousness and the brain. In addition, the brain's electrical patterns in sleeping and waking, as well as in dream and deep, dreamless sleep, have been intensively studied. EEG (electroencephalogram) recordings, PET (positron emission tomography) scans, MRI (magnetic resonance imagery), and MEG (magnetoencephalogram) images have recently given the living brain a transparency only dreamed of by earlier generations of researchers. Such techniques have been used to explore which brain areas are most active in waking, dreaming, and non-dream sleep. The same



techniques have also been used to investigate states of consciousness experienced in meditation.¹⁰ These findings are preliminary but fascinating, and whole theories of brain function in meditation are under development. Interestingly, a few scientists, such as British biophysicist Mae-Wan Ho, believe that consciousness actually resides throughout the body.¹¹ The strange reports coming from organ transplant recipients may add credibility to this seemingly outlandish idea.

Researchers within cognitive science and neuroscience have developed a variety of theories of mind based on complex representations of perception, linguistics, and behavior. While these theories often try to explain consciousness away, they provide an important contribution to an Integral understanding of consciousness.

Another fascinating aspect of the UR quadrant involves the physics of the effects of consciousness on matter.¹² Actually, it may be more correct to say the *involvement* of consciousness *with* matter, but the point is that on the quantum level of reality certain effects occur only when they are observed; that is, only when consciousness is involved. Perhaps the most famous instance, albeit allegorical, is the curious case of Schrödinger's cat. Schrödinger was a twentieth-century mathematician who wrote a mathematical expression, now known as "Schrödinger's equation," that describes the progress of a particle through space (usually an atomic particle such as an electron) as a mathematical "probability wave." Thus, if an electron is traveling through space, it actually makes its way as a kind of indefinite probability function. Hold onto your hat! This function produces the likelihood that the electron will show up at any particular location among its infinite possible trajectories. But here is the strangest part of it: the electron reappears again as an electron *only* when it is observed to be somewhere. It is a bit like playing tennis at dusk. As the ambient light dims, it becomes increasingly hard to actually see the ball in motion. The ball could be anywhere until it comes down again. The last time Combs mistakenly conducted this experiment the ball suddenly appeared immediately in front of his left



eye, followed by a brilliant flash of light and semi-blindness that lasted several minutes! There you have it: the probability function “collapsed,” as they say, right into his eye. Strictly according to quantum principles, it did not actually exist between leaving the racquet and hitting his left eye, except as a mathematical probability function.

You may say that the ball would have hit him in the eye whether he had seen it or not. However, if it were a quantum ball its appearance into concrete reality out of the realm of mathematical probabilities would depend on its being seen. In the Schrödinger’s cat story, the cat is placed in a box with a cyanide capsule that will explode and kill the cat if it interacts with an electron. We place the cat in the box, insert one or two electrons, and wait. At this point, before opening the box, we might suspect that the cat is either dead or alive, depending on the trajectory of the electrons. In fact, the point of view of quantum physics is that the cat is neither dead nor alive until it is observed in one state or the other! It is in a suspended state in which all outcomes are considered possibilities.

There are many experiments that can be carried out in an advanced Physics lab that demonstrate that many fundamental processes that make up our physical reality are dependent on observation. Rest assured none of these experiments, to my knowledge, involve real cats. It will come as no surprise, however, to learn that all physicists do not agree with this view. Some argue that the “observation” can be carried out by something as simple as a camera with a timer, set up to “see” where the electron strikes a sheet of film (or if the cat is alive or dead, I suppose). But others argue back that the location of the electron, like the vitality of the cat, has no definite meaning until somebody actually looks at the photograph to see where the electrons imprint lies.

This may seem strange, but think about it! The universe is made up of quantum-sized particles and waves. If matter must be observed by living consciousness to be real, then reality itself, without consciousness, would be like a castle built in air. Thus, consciousness is as fundamental as matter, if not more so. To test this view, parapsychologist Dean Radin and his colleagues have



placed “eggs” that contain random particle generators at locations all around the globe.¹³ They predicted that when large numbers of people concentrate on a single event the overall effect of this focused attention, or consciousness, would affect the purely random emissions of the eggs. Indeed, during events such as major tournaments the emissions become significantly less random. Just before, during, and for hours after the Twin Towers were attacked on 9/11 the change in probabilities was dramatic, with probabilities that typically ranged in the order of thousands to one against chance.¹⁴ While our understanding of the relationships between quantum physics and consciousness is still nascent, we need to be careful not to reduce consciousness to physics.¹⁵

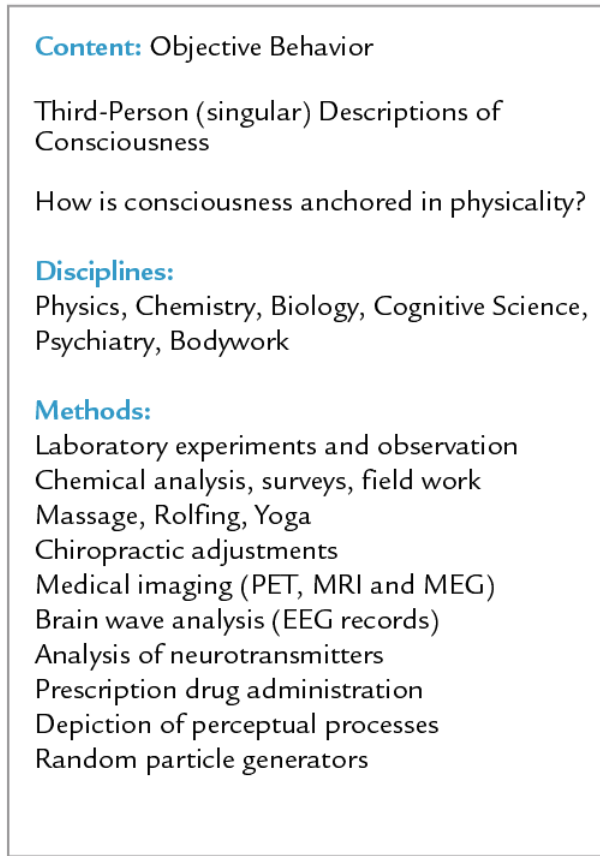


Figure 4. Examples of Content, Disciplines, and Methods of Consciousness in the Upper-Right Quadrant

Lower-Right Quadrant: Interobjectivity

The Lower-Right quadrant of consciousness is concerned with the content of *interobjective systems* presented through third-person plural descriptions: “Its” language. These descriptions are designed to answer the question: how is consciousness distributed across systems? Many disciplines offer important insights into consciousness from a third-person plural perspective: ecology, economics, sociology, artificial intelligence, and systems theory, to name a few. These disciplines employ a variety of methods and practices to access consciousness in its LR manifestations including: computer simulations, network mapping, statistical analysis, mathematical models, historical analysis, Marxist analysis, and the Turning test.



This quadrant encompasses *collections* of objects, processes, and living organisms, focusing on the patterns in which they interact. Broadly speaking, this quadrant is about *systems*. For example, each of the value structures of the LL quadrant corresponds to particular ways people typically organize themselves socially. Thus, there exists a whole series of social, political, and religious structures that correspond to the developmental value systems within the LL. These also correspond to particular forms of the sense of self found in the UL.¹⁶ For example, in full-blown *magical* consciousness there is little sense of individuality, or of an independent self; rather, each person is identified with a tribe, family, or clan. *Mythic* consciousness is clearly identified with the city-states of the ancient world, and more recent nation states. In its purest form, the individual self in this structure of consciousness is a collection of linguistic roles and mandates. A person is a soldier, scribe, midwife, or carpenter, with certain socially and linguistically designated expectations and responsibilities that are seen as part of the natural order. The *mental* structure of consciousness is associated with modern nations that are defined more in terms of economic interests than traditional allegiances to country and flag. Here, for the first time, we encounter fully developed individualism, often selfish individualism, in full career, for example, in the form of entrepreneurialism.

The LR quadrant includes any collection of persons, objects, or processes that interact as a system: ants in a colony, birds in a flock, traffic patterns on an interstate highway, activity on the world wide web, neural networks in the brain, tropical rain forest ecologies, world wide weather patterns, the global economy, and people in societies. The varieties are endless. And while LR topics are often investigated by empirical methods, such as experiments, it is more characteristic of this quadrant to employ statistical analysis and abstract theoretical and mathematical methods to understand the complexities of how collections of persons, objects, or energies interact to form complex systems. For example, computers are regularly used to simulate ocean currents, weather systems, rainforest ecologies, stellar evolution, and the growth of human cities. These simulations are based on theoretical models developed by the human mind. Even the inner



workings of the mind can be viewed as a psychological *system*, as I (Allan) have tried to do in my own research.¹⁷

Content: Interobjective Systems

Third Person (plural) Descriptions of Consciousness

How is consciousness distributed across systems?

Disciplines:
Ecology, Economics, Sociology, Artificial Intelligence, Systems Theory.

Methods:
Computer simulations
Network mapping
Statistical analysis
Mathematical models
Historical analysis
Marxist analysis
Turning test

Figure 5. Examples of Content, Disciplines, and Methods of Consciousness in the Lower-Right Quadrant

Conclusion

Consciousness is not just an Upper-Left reality but an all-quadrant affair that involves first-, second-, and third-person realities. Each quadrant represents a different aspect of a perspective on consciousness. Each of these perspectives is investigated through methods, techniques, and practices particular to the content of each quadrant (see Appendix). If we are to have a comprehensive understanding of consciousness, we need to investigate all of its expressions (Experience, Culture, Behavior, Systems) at all levels of complexity. Only then can we begin to have an Integral approach to consciousness studies. It is our hopes that this short article will serve as the beginnings of such an important endeavor.



Appendix

Upper-Left (UL)

Upper-Right (UR)

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INTERIOR

EXTERIOR

Content: Subjective Experience
 First-Person Descriptions of Consciousness
 How is consciousness experienced?
Some Disciplines:
 Psychology, Art, Poetry, Music
Some Methods:
 James' Introspection
 Husserl's Phenomenology
 Gebser's structures of consciousness
 Contemplative inquiry
 Meditation practices
 Sri Aurobindo's Integral Yoga
 Psychotherapy
 Gendlin's Focusing
 Dream journaling
 Creative expression
 Self-Reflection

Content: Objective Behavior
 Third-Person (singular) Descriptions of Consciousness
 How is consciousness anchored in physicality?
Some Disciplines:
 Physics, Chemistry, Biology, Cognitive Science, Psychiatry, Bodywork
Some Methods:
 Laboratory experiments and observation
 Chemical analysis
 Medical imaging (PET, MRI and MEG)
 Brain wave analysis (EEG records)
 Depiction of perceptual processes
 Analysis of neurotransmitters
 Prescription drug administration
 Massage, Rolfing, Yoga
 Chiropractic adjustments
 Acupuncture and acupressure

Content: Intersubjective Culture
 Second-Person Descriptions of Consciousness
 How is consciousness shared between individuals?
Some Disciplines:
 Ethics, Philosophy, Anthropology, Literature, Religious Studies
Some Methods:
 Spiral Dynamics value memes analysis
 Empathic resonance
 Cultivating spiritual compassion
 Buber's I-Thou exposition
 Socratic Dialogue
 Heidegger's hermeneutics
 Participant-observer techniques
 Foucault's Neo-structuralism

Content: Interobjective Systems
 Third-Person (plural) Descriptions of Consciousness
 How is consciousness distributed across systems?
Some Disciplines:
 Ecology, Economics, Sociology, Artificial Intelligence, Systems Theory
Some Methods:
 Computer simulations
 Network mapping
 Statistical analysis
 Mathematical models
 Historical analysis
 Marxist analysis
 Turning test

Lower-Left (LL)

Lower-Right (LR)



Endnotes

¹ Sobel & Sobel, *The hierarchy of minds: The mind levels; A compilation from the works of Sri Aurobindo and The Mother*, 1984

² Combs, *The radiance of being: Understanding the grand integral vision: Living the integral life*, 2002; Wilber, *Integral psychology: Consciousness, spirit, psychology, therapy*, 1998

³ Gendlin, *Focusing*, 1978

⁴ Wilber, *Integral psychology: Consciousness, spirit, psychology, therapy*, 1998; *Sex, ecology, spirituality: The spirit of evolution*, 2001

⁵ Graves, "NVC consulting, articles by Clare W. Graves," 2004

⁶ Bohart & Greenberg, *Empathy reconsidered: New directions in psychotherapy*, 1997

⁷ Goleman, "Mental health in classical Buddhist psychology," 1975; Segall, *Encountering Buddhism: Western psychology and Buddhist teachings*, 2003

⁸ Nooruddin, Mannan & Omar, *The holy Quran: An English translation*, 1997

⁹ Consult Hargens, "Intersubjective musings: A response to Christian de Quincey's 'The promise of Integralism,'" 2001

¹⁰ Murphy, Donovan & Taylor, *The physical and psychological effects of meditation: A review of contemporary research with a comprehensive bibliography*, 1997

¹¹ Mae-Wan Ho, *The rainbow and the worm: The physics of organisms*, 1999

¹² Powers, *Philosophy and the new physics*, 1982

¹³ Radin, *The conscious universe: The scientific truth of psychic phenomena*, 1997

¹⁴ Nelson, Radin, Shoup & Banceld, "Correlations of continuous random data with major world events," 2002

¹⁵ Consult Wilber, *Quantum questions: Mystical writings of the world's great physicists*, 1984; *The holographic paradigm and other paradoxes: Exploring the leading edge of science*, 1982

¹⁶ Wilber, *Integral psychology: Consciousness, spirit, psychology, therapy*, 1998

¹⁷ Combs, *The radiance of being: Understanding the grand integral vision: Living the integral life*, 2002



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