



Theory and Practice of Integral Sustainable Development —An Overview

PART 1: QUADRANTS AND
THE PRACTITIONER

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ABSTRACT: This is part one of a three-part paper that offers an overview of Integral Sustainable Development. The entire paper explains the rudiments of a practical framework that integrates the crowded conceptual and operational landscape of sustainable development and enables practitioners to 1) identify the full-range of needs and capabilities of individuals and groups, and 2) tailor the specific developmental response that fits each unique situation. The fundamentals of this framework are four major perspectives (explained in part I) and three waves of natural evolution (part II). The framework maps out and integrates human consciousness and behavior, culture, systems, and the physical environment. Drawing upon cross-cultural and transdisciplinary studies, as well as data from field researchers, this framework is shown to be vital for a comprehensive and accurate approach to addressing our social, environmental, and economic challenges. Included are specific tools for practitioners (parts I and II), as well as synopses of current sustainable development initiatives—by organizations such as UNICEF Oman and Educate Girls Globally—which are using this Integral framework (part III).



Introduction

Never before in history have we had access to so much information. The knowledge, understandings, and experiences from every sector of society and every human culture (past and present) can now contribute their part in solving the complex puzzle of existence. At the same time, never before in history have we faced such complicated and pressing social, environmental, and economic challenges. Now, more than ever, we need action based upon the deepest possible understanding of our global situation, the stakeholders involved, and ourselves.

This article introduces *Integral Sustainable Development*—an inclusive approach to sustainable development (SDv)—and shows its potential impact as a comprehensive method that differs from those in use today. The core of Integral Sustainable Development is a framework that can be used to:

1. Organize knowledge concerning SDv by offering an expansive understanding of reality that draws on as many disciplines, worldviews, and methodologies as possible;
2. Map SDv challenges of any scale—and their solutions—from the most inclusive vantage point we have to date, taking into account the major dynamics—interior (psychological and cultural) and exterior (behavioral and systemic)—which influence an initiative;
3. Tailor application according to the unique interior and exterior dynamics of stakeholders and the initiative, thus helping to optimize resources and achieve more durable and appropriate solutions.

Integral Sustainable Development practitioners recognize that the more dimensions of reality a SDv initiative takes into account, the greater chance it has of becoming a long-term, sustainable solution. For example: a solution based on economic analysis alone is less sustainable than one that incorporates economic, ecological, and social understandings; this, in turn, is less viable than a solution that also includes psychological, cultural, and religious



perspectives. Thus, Integral Sustainable Development practitioners are guided by the simple commitment to include as much knowledge about reality as possible, in the most sophisticated and pragmatic way available.

Part I of this three-part article offers the following: an overview of the state of sustainable development; a basic explanation of the Integral framework and its advantages; an introduction to the four major perspectives within the context of sustainable development; and a look at the importance of personal development for the sustainable development practitioner. Part II first explains three waves of natural human evolution as related to environmental sustainability; it then looks at the vital role of values and suggests two ways to work with them (transformation and translation); finally, it introduces the concept of Natural Design for sustainable development. Part III gives a synopsis of national and international sustainable development initiatives and organizations that use the Integral framework.

The State of Sustainable Development

Speaking at the London School of Economics in 2002, United Nations Secretary General Kofi Annan stated, “The whole idea of sustainable development... is that environment and development are inextricably linked.” He went on to point out that “Prevailing approaches to development remain fragmented and piecemeal; funding is woefully inadequate; and production and consumption patterns continue to overburden the world’s natural life support systems.”¹

Other leaders in sustainability and international development have voiced similar concerns not only about the state of the world, but also about the fragmented condition of our approach to these challenges:



What is significant in the concept of unsustainability is the idea that the risk we run is not a single crisis, but a crisis of crises: many breakdowns happening simultaneously throughout our entire environmental and socioeconomic system, and on a worldwide scale.... The concept of sustainability amounts to a call to deal with the entire complex of global problems as an interrelated whole. This challenge goes well beyond the scope of issues individual organizations and governments have had to deal with before, and it demands new ways of thinking and acting.... Clearly we have not yet found the right formula or context for the deployment of our knowledge in order to solve these problems.² – *Hardin Tibbs, consultant strategist in sustainability and futurist*

The next century will be characterized by increasingly complex problems, nationally, regionally, and globally. There will be a heightened awareness that these problems are closely interrelated. Our current, often fragmented, ways of understanding the world will not be sufficient any longer. To comprehend the scope of the problems, but also of the possibilities for creative transformation and transcendence, we need a more complex mode of knowing than the current instrumental rationality of modern science, characterized by disciplinary fragmentation and increasing specialization.³ – *Maureen Silos, PhD, development practitioner, founder of the Caribbean Institute*

The current fragmented and isolated approaches, even though well-funded and even politically 'correct,' are making things worse. Something new and fresh is now required. Africa is full of foundations, think tanks, institutes, academic and marketing research entities, private consultants, and experts from various backgrounds and persuasions. Each seeks after funding, makes claims of having 'the solution,' and promotes its particular perspective through the media, among political activists, and at conferences, summits, and scenario events. Each has a piece of the puzzle; none, in my view, has the whole picture. The time is certainly ripe for a new and more complex intelligence to enter the fray, one that has the capacity to integrate, align, and synergize all of the diverse approaches to create a holistic, multifaceted, and strategically focused series of disciplined efforts across the wide front of education, health care, community development, economic enhancement, wealth creation, infrastructure construction, and systemic conflict reduction.⁴ – *Don Beck, PhD, corporate and societal change consultant; founder, International Institute of Values and Culture*

Integral Sustainable Development is a response to these calls for an end to the age of fragmentation in this field. It is a first attempt to create a context for deploying knowledge from the full spectrum of established disciplines in order to address local and global social and environmental problems. This fragmentation in the sustainable development (SDv) arena is evidenced by, among other things, the multiple definitions of SDv, the myriad



frameworks and methodologies for enacting SDv, and the vastly differing motivations for why we should pursue a sustainable future.

To date, there is no universally agreed-upon definition of sustainability or sustainable development. There are at least four commonly used definitions of sustainability, all of which emphasize functional fit (or how parts fit together into complex wholes): political, systems, economic, and ecological.⁵ Multitudes of methodologies and frameworks suggest how to best understand and implement sustainable development.⁶ Each of them responds differently to our social, environmental, and economic challenges. Finally, there is also a wide range of divergent and seemingly contradictory justifications for engaging in sustainable development.⁷ The combination of these three issues makes the alignment of local, national, and international efforts at implementing SDv—amongst governments, corporations, NGOs and the global public—considerably complex. How does a SDv leader choose the right definition, the best approach, and the ideal argument for motivating people into action? Which path is right, which is wrong—and under what conditions? Integral Sustainable Development intends to bring increased clarity to these issues.

The Integral Sustainable Development Approach

Instead of asking ‘which approach is right and which is wrong,’ an Integral Sustainable Development practitioner asks, ‘what kind of universe is it that allows for all of these definitions, methodologies, and reasons to arise in the first place?’

With the answer to the above question, the Integral Sustainable Development framework emerges—able to hold and organize the major forces influencing SDv. The essence of Integral Sustainable Development is that with a large enough perspective, *everyone is right*: all definitions address an important dimension of reality, each approach focuses on a necessary area of SDv, and all justifications are valid within their context. This inclusive approach helps



dissolve the fragmentation issue in theory and practice. Integral Sustainable Development uses a comprehensive framework in which components of SDv can be organized and subsequently integrated to work together synergetically. Each of the myriad approaches and variables concerning SDv are thereby brought together into a unified front so that they can complement, inform, and supplement each other. This broad scaffolding enables development practitioners to see all of the principle facets of reality and tailor their approach accordingly.

Dr. Randolph Kent is the former UN Humanitarian Coordinator for Rwanda, Kosovo, and Somalia, and is currently doing research on humanitarian futures. He notes that the time has come for new approaches to our complex SDv challenges:

The practitioner—the policy-maker, the planner, the strategist—may use different terms, but the fact of the matter is that the growing official commitment to “thinking out of the box,” integrated decision structures and increased investment in “futures” analyses suggest a community that knows that change and its often complex consequences can no longer be addressed through traditional means.⁸

The Integral framework described in this paper is already being used in international development. As we’ll see in part III (which gives a broad overview of Integral Sustainable Development in practice) approaches to SDv that are increasingly Integral in nature are emerging worldwide, and have been for some time. iSchaik Development Associates⁹ have used an approach informed by Integral Theory since 1995.¹⁰ In a presentation to UNICEF, Dhaka, they state that “[The Integral approach] is the bigger picture within which all the ideas and developments with which UNICEF is involved must be seen.”¹¹

It is important to note that the Integral Sustainable Development framework that I lay out in this article is not a model to implement; it’s not a formula, but rather a perspective on the whole picture of reality around sustainable development. This is a framework that is used by many leaders to inform and shape their thinking around program design, communications, assessment, and staffing. The Integral framework reminds us to consider all components of



reality and be mindful of all levels of development as we strive to understand and struggle to implement sustainable development.

The Integral Framework: Overview

In order to develop a perspective wide enough to account for all dimensions of SDv, and create scaffolding that holds all existing SDv knowledge and praxis, Integral Sustainable Development is grounded in the Integral framework. This comprehensive framework is most clearly propounded by philosopher Ken Wilber. With 22 published books and over 100 articles, some appearing in more than two dozen languages, Ken Wilber is perhaps the most translated academic author in the United States. *Integral Theory* is the result of over 30 years of inter- and transdisciplinary scholarship in which Wilber and others have begun to integrate and synthesize knowledge and research from many domains of inquiry, including: biology, psychology, sociology, anthropology, philosophy, and Eastern and Western—as well as ancient and modern—spirituality.¹² Integral Theory has already been applied to sustainable development, governance, education, medicine, psychology, business, future studies, leadership, politics, religion, and numerous other disciplines.¹³

Wilber's definition of "Integral" is as follows:

Integral: the word means to integrate, to bring together, to join, to link, to embrace. Not in the sense of uniformity, and not in the sense of ironing out all of the wonderful differences, colors, zigs and zags of a rainbow-hued humanity, but in the sense of unity-in-diversity, shared commonalities along with our wonderful differences. And not just in humanity, but in the Kosmos at large: finding a more comprehensive view—a Theory of Everything (T.O.E.)—that makes legitimate room for art, morals, science, and religion, and doesn't merely attempt to reduce them all to one's favorite slice of the Kosmic pie.¹⁴

Wilber summarizes use of the Integral framework this way:

The whole point about any truly Integral approach is that it touches bases with as many important areas of research as possible before returning very quickly to the specific issues and applications of a given practice.... An Integral approach means, in a sense, the 'view from 50,000 feet.' It is a panoramic look at the modes of inquiry (or the tools



of knowledge acquisition) that human beings use, and have used, for decades and sometimes centuries. An Integral approach is based on one basic idea: no human mind can be 100% wrong. Or, we might say, nobody is smart enough to be wrong all the time. And that means, when it comes to deciding which approaches, methodologies, epistemologies, or ways of knowing are 'correct,' the answer can only be, 'All of them.'... Since no mind can produce 100% error, this inescapably means that all of those approaches have at least some partial truths to offer an integral conference, and the only really interesting question is, what type of framework can we devise that finds a place for the important if partial truths of all of those methodologies?... To say that none of these alternatives are 100% wrong is not to say that they are 100% right. Integral approaches can be very rigorous in standards of evidence and efficacy, a rigor that some holistic approaches let go of too quickly in an attempt to be 'all inclusive.'¹⁵

The main components of the Integral framework are quadrants, levels, lines, states, and types. In this three-part article, the rudiments (quadrants and levels) of Integral Theory are explained and correlated with SDv.¹⁶

The Integral Framework: The Four Quadrants

The Integral framework views individual, social, and environmental phenomena through four basic quadrants: the interior and exterior of individuals and collectives. (See diagram 1). These are four distinct dimensions of reality, or four unique ways of looking at the same occurrence. They are represented as: individual interiors (Upper-Left quadrant: UL) like psychology and consciousness; individual exteriors (Upper-Right quadrant: UR) such as behavior and the physical body; collective interiors (Lower-Left quadrant: LL) like culture and worldview; and collective exteriors (Lower-Right quadrant: LR) such as systems and the physical environment. The quadrants can also be referred to, respectively, as Consciousness (What I experience), Behavior (What I do), Culture (What we experience), and Systems (What we do). Later in this article, I'll detail which issues, components, and dynamics of SDv arise primarily in which of the quadrants.

The four quadrants are a simple way to organize the innumerable subjective and objective dimensions of individuals, societies, and the environment. These dimensions have been



“intensely investigated by literally hundreds of major paradigms, practices, methodologies, and modes of inquiry.”¹⁷ They represent the four principal perspectives, or domains, of “being-in-the-world.”

		INTERIOR	EXTERIOR
INDIVIDUAL	<p>CONSCIOUSNESS "What I experience"</p> <p><i>Areas studied:</i></p> <p>"I", subjective realities, e.g. self and consciousness, states of mind, psychological development, mental models, emotions, will.</p> <p style="text-align: right;">UL</p>	<p>BEHAVIOR "What I do"</p> <p><i>Areas studied:</i></p> <p>"It", objective realities, e.g. brain and organism, visible biological features, degrees of activation of the various bodily systems.</p> <p style="text-align: right;">UR</p>	
	COLLECTIVE	<p>CULTURE "What we experience"</p> <p><i>Areas studied:</i></p> <p>"We", intersubjective realities, e.g. shared values, culture and worldview, webs of culture, communication, relationships, norms, boundaries, customs.</p> <p style="text-align: right;">LL</p>	<p>SYSTEMS "What we do"</p> <p><i>Areas studied:</i></p> <p>"Its", interobjective realities, e.g. social systems and environment, visible societal structures, economic systems, political orders, natural resource management.</p> <p style="text-align: right;">LR</p>

Figure 1. Four quadrants of the Integral framework, with respect to humans and the physical environment.

On their simplest level, the quadrants merely acknowledge that there’s an inside and an outside to individuals and collectives. All individuals have an interior no one else can see, like our thoughts, emotions, and self-awareness; and we all have an exterior which others *can* see, such as our body and behavior. With collectives: there’s an interior, like shared values,



relationships, customs, morals, and communication; and an exterior, such as economic and political systems, habitats, and biota. Essentially, the Right-Hand quadrants (Behavior and Systems) examine the surfaces of individuals and collectives, while the Left-Hand quadrants (Consciousness and Culture) look into their depths.

These four perspectives are embedded in every major language in the world, as first, second (i.e., first-person plural), and third-person pronouns. For example, they arise as “I,” “We,” “It,” and “Its.” Thus, the UL, or Consciousness quadrant, represents the way that any “I” sees the world. The LL, or Culture quadrant, represents the way any “We” sees the world. The UR, or Behavior quadrant, represents the way “It” is seen. The LR, or Systems quadrant, represents the way “Its” are seen. By combining the “It” and “Its” domains (the Right-Hand quadrants, UR and LR, Behavior and Systems) into just “It,” Wilber notes that

These dimensions of being-in-the-world are most simply summarized as self (I), culture (we), and nature (it). Or art, morals, and science. Or the beautiful, the good, and the true. Or simply I, we, and it.... And the point is that every event in the manifest world has all three of those dimensions... [A]n integrally informed path will therefore take all of those dimensions into account, and thus arrive at a more comprehensive and effective approach—in the “I” and the “we” and the “it”—or in self and culture and nature. If you leave out science, or leave out art, or leave out morals, something is going to be missing, something will get broken. Self and culture and nature are liberated together or not at all.¹⁸

Again, the quadrants are merely four distinct ways of looking at any single occurrence, four basic perspectives for looking at anything. The Left-Hand quadrants are what the event looks like from within, the Right-Hand quadrants show what the same event looks like from without. Interior and exterior, consciousness and form, subjective and objective. These two dimensions are combined with the singular and the plural. No matter what happens, there is always an individual experiencing the occurrence, and that individual is at all times connected to a collective—the community in which he or she exists. Both the individual and the collective experience this event in a subjective way, and in an objective way. Thus, the quadrants represent the interiors and exteriors of individuals and collectives. Let’s look at an example.



Example: The Four Quadrants of a Kofi Annan Statement

I	It
We	Its

As a simple example, look at Kofi Annan’s statement (from page 4) through each of the quadrants. First, there is the obvious realm of “what he does”. When he said, “Prevailing approaches to development remain fragmented and piecemeal,” the statement itself is represented by the UR quadrant; it is a behavior, an individual-exterior event able to be “seen:” the movement of his mouth and the creation of sound waves. Simultaneously, in Kofi Annan’s brain—also represented by the UR quadrant—neurotransmitters flow, synapses fire, and brainwaves shift, all corresponding to how he feels and thinks about his statement. He might also show exterior, measurable increases in his heart rate and skin temperature if he’s passionate about the issue. These neurotransmitters and other bodily changes, along with his behavior, are all represented by the UR quadrant.

I	It
We	Its

A second part of the statement concerns his own experience of the event, including why he does what he does. The emotions, beliefs, education, and conditioning that inspired Kofi Annan to make this statement all are aspects represented by the UL quadrant, as are the very thoughts he has as he’s saying it. His inner experience of the statement—a feeling of hope, desperation, or deep peace—is represented by the UL quadrant. This individual-interior experience represents ¼ of the whole picture; when combined with the individual-exterior reality—his behavior, brain and organism—these two quadrants present the entirety of his individual reality concerning this single statement.

I	It
We	Its

The third realm concerns what we experience as well as why we do what we do. Secretary General Annan is part of many communities at the moment he makes this statement. The interior dimensions of these communities are the domain of the LL quadrant. One community is made up of those who speak English; another consists of those who understand what he means by development; a third is the people who share a high degree of care and compassion for the plight of the world’s poor and the environment. Without the interior commonalities of being able to mutually understand English and the



notion of development—while sharing a deep concern—Kofi Annan’s communication would fail. If someone didn’t speak English, understand the idea of development, or care as much as Kofi Annan, then part of his communication would be lost. All of these interior-collective issues are represented in the LL (Culture quadrant) and Kofi Annan’s statement can only be understood by those who share a LL quadrant with him. This is a good example of why the realities represented by the quadrants always arise together; the realities associated with one quadrant do not exist without the realities associated with the others. In this case, the mutual understanding that develops in the LL quadrant cannot occur without:

- 1) Activity in the UL quadrant (the intention to speak);
- 2) Action in the UR quadrant (the spoken phrase), and,
- 3) Forces in the LR quadrant (the exterior systems that support the mutual understanding).

I	It
We	Its

Finally, there’s the realm of “what we do.” This concerns the LR quadrant: systems and the environment. There are numerous systems involved in Kofi Annan’s statement. One is the audio-visual system that broadcasts his message. Others are the economic and transportation systems that enabled his audience to be present. The social, ecological, and industrial systems that provided coffee to keep people alert are also interlinked and unable to be separated from the context of his statement. A subsequent LR event, potentially catalyzed by this statement, might be a gathering of development leaders from the public and private sectors—virtually or physically—to strategize how to integrate development efforts. This single statement about fragmented development might go on to impact other systems reflected in the LR quadrant, such as future policy design, organizational structures, compensation programs, and educational systems.

Thus, Kofi Annan’s “single statement” actually has four aspects: psychological, behavioral, cultural, and systemic. These four perspectives, the quadrants, provide insight into much of the reality concerning his statement. Everything has these four aspects and can be viewed through these four perspectives. An understanding of SDv is thus incomplete without taking into consideration all four of these perspectives and the dynamics present in each of them.



Therefore, in order to comprehensively grasp and accurately respond to our social, environmental, and economic challenges, we need to account for the factors and forces associated with each of the quadrants, as they all affect the success (or lack thereof) of any SDv initiative.

The Importance of All Quadrants for Sustainable Development Initiatives

All four quadrants are inseparable components of every occurrence. They always arise together, as distinct dimensions of reality. Each is an indispensable domain, interconnected with and affecting the others. Each plays a crucial role in the success or failure of any SDv initiative. As I go through the quadrants in more detail, I'll give further examples of this.

The more that is known about the influences of consciousness, behavior, culture, and systems on sustainable development, the more effectively programs can be designed and implemented.

If a particular methodology only takes into account one or two dimensions of reality—one or two quadrants—it literally addresses only half the picture, and therefore has a higher chance of failure. The complexity of today's development dilemmas calls for an approach that leverages all SDv tools available.¹⁹ Integral Theory is founded on an experiential understanding that disconnected or unbalanced solutions often do not generate sustained success. Therefore, one of the core principles of Integral Sustainable Development is that the realities of all four quadrants should be taken into account when designing and implementing SDv initiatives.

For international development, the Integral approach is a natural fit. All of the key issues that the quadrants address are already major threads in the weft and warp of the development tapestry: politics, education, health, economics, psychology, culture, religion, philosophy,



individual behavior, organizational dynamics, etc. The advantage is that by using an Integral framework, SDv initiatives have a higher chance of being sustainable because more of reality is taken into account. Sean Esbjörn-Hargens, former development worker in Asia and Africa, and Co-Director of the Integral Ecology Center, explains:

Sustainability increases because the more of reality you acknowledge and factor into a project, the more it will be able to be responsive to the complexity of reality. One cannot leave out major dimensions of reality (e.g., psychological or economic) in environmental problem solving and expect long-lasting results. Eventually those realities that have been left out will demand to be recognized and incorporated into the design of any project. Otherwise the current design will falter and be left behind eventually for more nuanced and comprehensive strategies. So the best way one can incorporate sustainability into project design and trouble-shooting is to acknowledge and include as much of reality in one's efforts. Hence the need for an Integral approach to adequately respond to today's complex eco-social problems.²⁰

One of our intentions at the Integral Sustainability Center is to clarify how this Integral approach can be used to improve SDv program assessment, design, implementation, communication, on-going evaluation, and practitioner development. Let's continue by taking a closer look at each of the quadrants in relation to SDv and humans in particular. This will be followed by a look at the vital role that the practitioner and his or her personal development play in effecting successful sustainable development.

Consciousness and Sustainable Development: The Upper-Left Quadrant

I	It
We	Its

 The Upper-Left quadrant (UL) represents all the factors that directly influence an individual's experience of the world. It is a map of an individual's subjective experience and interior. The UL covers the entire realm of self and consciousness. Everything someone expresses in first-person, "I" language is associated with this quadrant. This includes one's thoughts, feelings, intuitions, sensations, and intentions. The UL concerns the role that an individual's mental model, psychological makeup, multiple intelligences, states and stages of consciousness, beliefs, emotions, pathologies, will, and conditioning have in shaping his or her attitude (which in turn influences behavior). This part of the Integral



framework houses “*What an individual experiences*”, which includes *why* he or she does something.

In her article “Integrating Interiority in Community Development,” Gail Hochachka, an international development consultant practicing in El Salvador, describes the realm of this individual-interior as follows:

Self-reflection and Personal Growth: The psychological and cognitive processes involved in making meaning, constructing identity, structuring reasoning, and forming worldviews. Also involves self-reflection or contemplation on roles within the community, society, environment and world, and shifts within and between value systems. Includes self-empowerment, personal growth, emotional and moral capacity building, introspection, contemplation, and spirituality.²¹

Cynthia McEwen, a consultant in leadership for sustainability, and Co-Director of the Integral Sustainability Center, complements this understanding. In her master’s thesis, *Exploration on Sustainability, Communication and Consciousness*, she comments on her personal responsibility (UL). “The inner dimension looks at the role of my inner process as I go through a project. How does it inform and shape me? What do I need to know, uncover and learn in order to see more deeply into what is affecting my ability to communicate and dialogue?”²² Thus, inquiry into aspects of the UL quadrant is essential for understanding others and ourselves.

Investigation into the UL allows us to look at the effect these interior forces and factors have on the outcome of SDv initiatives. An individual’s attitudes toward the environment, development, and other people can give rise to behavior that either thwarts or supports SDv. An Integral Sustainable Development practitioner, therefore, accounts for this psychological and consciousness component of reality—not only in the reality perceived by others, but in his or her own as well.

If a group of children is terrified of needles and refuses to be vaccinated, how does that affect the success of an immunization program? If a development project manager feels jealous of



the media attention other CSO (Civil Service Organization) leaders are getting, what role does that play? If someone feels degraded, left out and unheard during a training, but never says anything, what consequences ensue? If an analyst holds a strong bias toward rationality, and dismisses other ways of knowing, how does that influence her report and suggestions?

Innumerable forces emerge out of every stakeholder's interior that directly impact any approach to sustainable development. These forces influence both the cause and cure of systemic imbalances. Thus, mindfulness of individual consciousness (belief system, mental model, motivations, etc.) is vital when attempting to address all the major influences on a sustainable development initiative.

SDv practitioners incorporating the UL are aware of the degree to which stakeholders (including themselves) know the behaviors required for implementation *and* are motivated to perform them. This investigation into the interior of individuals goes deeper than a superficial consideration of whether people have the information; instead, it examines whether they actually absorbed, comprehended, and are interiorly inspired to act upon such information.

Inquiry into someone's experience cannot be done objectively. There are quadrant-specific methodologies that accurately access the "data" associated with the UL (e.g., phenomenology, psychotherapy, self-reflection, introspection, and meditation). Revealing this subjective knowledge requires the ability to enter the individual's interior world and return with authentic and truthful accounts of the content of that interior space. (What is the subject's interior experience, as described by them, and are they telling the truth?) As Sean Esbjörn-Hargens notes, these realities "are most accurately known through felt-experience (e.g., direct perception, introspection, phenomenological investigation, meditation, body scanning)." ²³ Researchers of the self and consciousness, like Freud, Jung, Piaget, Loewinger, Kohlberg, and Buddha, have delved deeply into this realm.



We'll end this section with Hochachka's examples of how she worked practically with the individual-interior in community development in El Salvador:

Rather than fostering dependency and the expectation that exterior entities (NGOs, government, etc.) would solve the community's problems, which was particularly the case in Jiquilisco Bay, the Integral framework made room for "self" in the process of community-directed development. We did not utilize self-development methodologies as described in developmental psychology but instead created conditions for personal growth, self-empowerment and self-reflection throughout all phases of the project. The domain of "I" arose during the house-to-house visits, where community inhabitants discussed their lives, families, every-day activities, thoughts and perspectives, and our research team cultivated openness to truly hear what was said. The Upper Left quadrant of Wilber's AQAL [All-Quadrants, All-Levels] framework was also present in the focus groups, in which we created a trusting and expansive space in which participants shared inner reflections. As a practitioner, my own self-development practices (of yoga and meditation) helped to foster my own expanded awareness, to be clear of my intention and to be receptive to intuition regarding the project... Including the domain of "I" in development enables individuals to better understand their current and potential role in effecting positive change in their community or society, as well as their individual impact on each other and the environment.²⁴

Behavior and Sustainable Development: The Upper-Right Quadrant

I	It	The Upper-Right quadrant (UR) represents the exteriors of individuals. In humans, this is an objective map of one's behavior, brain, and organism. All individual things, described in third person, "It" language, form this quadrant. The UR consists of what any thing or event looks like from the outside (e.g., brainwaves, using birth control, or turning off the lights). It concerns the role that human health and behavior have on any occurrence. This part of the Integral framework houses " <i>What an individual</i> does."
We	Its	

Knowledge of the UR reveals which individual-exterior forces influence SDv initiatives, and how they do so. Certainly the health of an individual, or their behavior, helps a project flourish or flounder. How much does the energy-level of a practitioner impact their



effectiveness? How does a community leader's public behavior shape the outcome of a development program? How does malnutrition threaten a child's learning capacity? What would the repercussions be if we learned how to synthetically photosynthesize, or if we identified a cure for AIDS? An Integral Sustainable Development practitioner therefore takes these vital individual-exterior dimensions into account throughout the entire project, from the initial needs assessment through to the final evaluation.

Ultimately, it is the effect of malnutrition, disease, depleted resources, and toxic wastes on a living organism that is a major drive for SDv itself. We do not work on SDv to sustain a value or belief but to sustain an organism in its environment. "Saving" the Upper-Right quadrant is therefore a primary motivator of SDv. As we will see in Part II of this article, this act of sustaining the organism in its environment requires a value system and belief that support it, otherwise the requisite action is far less likely to consistently occur.

To investigate the realities associated with this quadrant requires utilizing natural sciences—from empiricism to autopoiesis. Chemistry, biology, and behaviorism are examples. This quadrant deals with objective realities that rely on scientific measurement (e.g., laboratory observation, field research, chemical testing, and statistical analysis).

Other SDv examples highlighted by the UR quadrant are: established standards for individual behavior, toxicity of a water source, personal hygiene, physical exercise, diet, choosing organic fertilizer, opting for drip-irrigation, the act of balancing the organizations' books or fundraising, and checking whether fulfillment instructions were accurately heard.

A comprehensive approach to a sustainable development initiative would, at the very least, document the individual behaviors that significantly contribute to a successful and enduring implementation, as well as the real threats to an individual's life.



Culture and Sustainable Development: The Lower-Left Quadrant

I	It
We	Its

The Lower-Left quadrant (LL) represents all the realms and reasons that directly influence a group’s experience of each other and the world. It is a map of intersubjective realities, the interior of collectives. The LL covers the entire arena of culture and worldview. All expressions that are stated in second-person “you” language and first-person-plural “we” language lie in this domain. This includes the values, practices, beliefs, perceptions, meanings, and ethics that are shared. The LL highlights how religions, ideologies, morality, background contexts, the attitudes of family and friends, and other facets of intersubjective reality—even communication itself—shape the shared disposition toward the world. This shared disposition, in turn, influences the actions a group takes collectively. This part of the Integral framework encompasses “*What a group collectively experiences*”, which includes *why* a group does things together.

In her development work, Hochachka referred to this arena as:

Dialogue and Process: Collective worldviews, mutual understanding, group visioning and cultural value systems involved in building relationships, trust and social appropriateness. Examples include the cooperative approach of reaching a common vision and shared goals, the collective values and morals upon which social institutions and the techno-economic base are built... [also] communicative processes, participatory frameworks and social capacity building, which are important in negotiating values and ethics, arriving at a common vision, and deciding upon appropriate actions.²⁵

McEwen complements this with her personal LL responsibility as a leadership consultant: “This dimension explores the ways conversation and dialogue can contribute to collective growth, learning, and creativity. What do I need to know and learn in order to participate in and help take conversation deeper and to a more creative, generative place?”²⁶ Thus, investigating the LL is vital for understanding how groups see the world and what they collectively consider valuable.



Inquiry into the realities represented by the LL reveals which intersubjective forces can harm or heal a SDv initiative. How a group perceives the environment, a development project, the training and communications—even the way they interpret the practitioners themselves—can profoundly change the final outcome. The extent to which a project reflects an understanding and respect for these cultural nuances and shared depths will directly relate to its success and sustainability.

An Integral Sustainable Development practitioner strives to be constantly conscious of the underlying pressure of cultures, worldviews, norms, traditions, rituals, and rules of the group—and respond accordingly.

If a shaman is honored within a community, what are the ramifications of not truly understanding why this is so? What consequences ensue if a SDv program is insensitive to this truth? If a culture of scientific rigor dominates an organization, what risks are run by not fully adopting this into all communications? What impact does a foundation of traditional values have on the introduction of new policies or technologies? When mutual understanding is not truly achieved, what is lost?

The degree of collective care, compassion, and respect—or disregard, stigma, and avoidance—with which a culture views a problem (like deforestation, poverty, or HIV/AIDS) directly affects the way a member of that culture views the problem (UL). This view, in turn, influences his or her behavior (UR). Thus, the myriad forces surging forth from the culture complement those arising from individual consciousness and behavior—as well as those which arise from systems—and together they affect the cause and cure of social, environmental, and economic problems. With this awareness, an Integral Sustainable Development practitioner either counters or encourages these LL forces to help collectives manifest their goals.



Attention to the LL necessitates, for example, a diligent inquiry into both community and organizational culture. This is more than checking to ensure that “culture-building” activities and group trainings are working; it calls for a thorough analysis of the community/organizational culture and shared beliefs concerning SDv. Skillfully entering this collective-interior space yields knowledge of what is just, appropriate, and held in common within a particular culture or group. The specific sciences required to accurately do this are based in hermeneutics, which explores mutual understanding, and cultural anthropology, which investigates patterns of mutual understanding. This cultural and worldview “data” is best recognized through processes of “mutual resonance (e.g., dialogue, energetic connection, shared depth, participant-observer techniques, interpretation).”²⁷

The actual practice of addressing the LL is restricted by which of its elements can be brought into a sustainable development program. Examples include: enhancing stakeholders’ communication skills; creating “support groups” (for community members and/or practitioners)²⁸ in which any grievances concerning a SDv project can surface and be addressed; and demonstrating a general understanding of cultural judgments and their effects on SDv interventions in project design and communications.

We’ll finish again with Hochachka’s insights into working with the collective-interior in the practice of community development:

The initial phase of the research comprised house-to-house interviews that gave us an opportunity to learn about community values and dynamics, and to build trusting relationships with community members. The tools used were dialogue, group visioning, appreciative inquiry and community mapping.... Our discussion flowed into action in the third phase, including training workshops, meetings, fundraising, cross-community exchanges, and soliciting assistance for specific initiatives.²⁹



Systems and Sustainable Development: The Lower-Right Quadrant

I	It
We	Its

The Lower-Right quadrant (LR) represents the arena of objective descriptions and explanations of how our social, economic, political, and ecological systems operate. It is a map of collective-exterior, interobjective realities, encompassing all systems and the physical environment. Everything described in objective, third-person, “Its” language that refers to collectives, falls into this domain. This includes physical structures, architectural styles, the ecological web of life, modes of information transfer (e-mail, ideograms), social structure (survival clans, ethnic tribes, feudal orders, agrarian empires, industrial states, value communities, informational global federation, etc.), population size, even classroom layout. The LR concerns all the areas where groups do things together, or where nature operates. The truths from these areas can help show how these collective actions and systems affect everything else. This part of the Integral framework houses “*What a collective does.*”

Hochachka defines this domain in relation to community development:

Action and Application: The quantifiable, measurable, and exterior components of development. Includes, economic and ecological parameters (i.e. the economic feasibility and ecological management and conservation) and the political and institutional arrangements necessary for development (i.e. the community councils, communal development associations, cooperatives, community credit unions).... [It] includes fulfilling economic, social, and political needs through various types of infrastructures, management plans, institutional designs and technical capacities.³⁰

The collective-exterior of systems and the environment is familiar territory for international development practitioners; the influence of LR forces and factors on development programs is well documented. This quadrant incorporates all of the social, economic, material, and environmental factors that help ignite or extinguish our local, national, and global development dilemmas. For example, the approach a SDv program takes toward natural resource management, social delivery systems, and organizational structure directly impacts the outcome. To successfully deliver aid requires an effective social system, otherwise food rots in warehouses while people starve. To efficiently clean up toxic waste sites necessitates a



healthy technology-transfer and communications systems (either intra-national or global); otherwise, the biological and technological solutions necessary may never reach people who can use them. How does USAID development policy concerning birth control influence a global initiative to stem the spread of HIV? What role does the organizational structure of a development agency play in unleashing the creative potential of its practitioners? How can the local ecosystem be restored while concurrently generating revenue for the community?

To work with the collective-exterior means to incorporate and be open to the truths and perspectives from all levels of collective institutions and systems, including the physical environment.

Research in this domain is objective. The data reveals the fit and function of system components and subsystems and how these operate together to help achieve the objectives of nature, groups, and society as a whole. The most accurate way to know these systems and environments is “through functional-fit (e.g., part-whole relationships, observation of systemic dynamics instrumental function, energy flows, feedback loops).”³¹ According to Integral Theory, Lower-Right quadrant sciences are based in social autopoiesis, which explores self-regulating dynamics in systems, and systems theory, which investigates the functional fit of parts within a whole.

Sustainable development has predominantly been approached through the LR, focusing primarily upon social systems and the environment. This approach to SDv is founded upon the accurate belief that there are systemic causes to environmental destruction, poverty, hunger, overpopulation, resource inefficiency, and so forth. Possibly because this is the most obvious way to handle problems, systemic interventions have become the principle medium for SDv. The Integral framework adds to this understanding an awareness that every social, systemic, or environmental event (LR) has four dimensions (all four quadrants); therefore, even systemic imbalance requires an all-quadrants view into its causes. The LR factors are



central—not separate—for SDv, but they form only one-quarter of a core of determinants. The systems factors are influenced by, complemented by, and arise alongside experiential (UL), behavioral (UR), and cultural (LL) factors. Integral Sustainable Development practitioners realize that understanding the LR is a vital part of comprehending the entire four-quadrant reality of SDv. Working in the LR is necessary for effective SDv. The Integral framework suggests, however, that only working in the LR is partial and incomplete; doing so only addresses one-quarter of reality and is not the most effective approach possible.

Predominantly systemic approaches to sustainable development are more likely to be effective if replaced by comprehensive, synergetic responses that account for the major forces in all quadrants.

Working with All Four Quadrants Simultaneously

I | It Wilber notes: “We can’t reduce these quadrants to each other without profound
We | Its distortions.... The quadrants are all interwoven. They are all mutually determining. They all cause, and are caused by, the other quadrants.”³² The quadrants (and the aspects of reality they represent) arise together, influencing and informing each other in every moment. Each individual is a member of a collective. Each interior event (i.e., belief, emotion, stigma) has an exterior correlate (i.e., behavior, neurotransmitter level, collective avoidance). The Integral framework offers a way to begin to correlate the effects that each quadrant has on SDv as a whole. Even if a quadrant is ignored, it still exists and its forces constantly apply pressure to any SDv initiative. The events in any single quadrant reverberate through each of the other quadrants; therefore, problems in one often lead to problems in the others.



Sustainable development initiatives have a greater chance of success if they respond to all the major influences that arise from each quadrant (consciousness, behavior, culture, and systems). Approaches that fail to do so face the real threat of sabotage by forces and factors in quadrants left unattended.

An Integral approach involves a disciplined process of relating each quadrant's experience and "data" to the remaining three quadrants. For example, if a survey reveals that community members have a shared belief that their opinions and ideas aren't being taken seriously by project managers, which in turn thwarts the effectiveness of a country-wide training program in rotational grazing, an Integral response would address all four quadrants. The remedy might consist of training managers in communications skills and mutual understanding (LL), and include a post-training comprehension evaluation (UR). It could also involve developing an evaluation system (LR) that periodically assessed this capacity (UR) in managers. An adjustment to the managerial hiring and promotional system (LR) could be made, rewarding managers who consistently showed (UR) expertise and wisdom in this area. Finally, management teams could be developed with a collective commitment (LL) to authentically demonstrate (UR) mutual understanding throughout training programs.³³

The Integral approach is therefore striving to "hear" each communication in every major part of reality, without privileging one or the other, or reducing one communication to another. Then—once anchored in this understanding of interwoven truths—the Integral approach allows us to take effective action. The next section of this three-part article, addressing *levels*, or *waves*, of development, is a further exploration of understanding, honoring, and integrating different truths. It offers another facet of the Integral framework, one more key to a pattern that attempts to connect all major truths.

In closing the first part of this article, let's finish with a look at the very person that is attempting to connect these truths about sustainable development: the Integral Sustainable



Development practitioner.

The Integral Sustainable Development Practitioner: The Link between Consciousness and Sustainable Development

One of the core tenets of Integral Sustainable Development is the recognition that we are part of this grand territory, not simply observers or analysts of its flows and patterns. Integral Sustainable Development recognizes that no matter which framework or approach to SDv is used, we have traditionally underrepresented and underrated the role that our own individual psychology, mental models, and worldview play in the success or failure of our endeavors. Interior development is a vital component to helping us develop attitudes and mindsets that naturally give rise to behavior that nurtures SDv. This behavior, when expressed by a collective culture made up of individuals who have also deeply developed their interiors, will lead to systems and institutions that fully embrace SDv values. There are certain transformative practices—such as introspection, awareness training, contemplative prayer, meditation, psychotherapy, and voluntary service—which help accelerate the process of interior development.³⁴ These practices aid individuals in discovering the “deep roots of the attitudes, beliefs, and emotions that give rise to personal, cultural, socio-political, and scientific-technological practices” which, in turn, thwart SDv at the local and global levels.³⁵

It is not only unproductive but also potentially dangerous to merely focus on the exterior world. We miss out on tremendous opportunities if we only try to change others’ unsustainable behavior and attempt to transform the systems that contribute to unsustainability. To disregard the development of one’s self—one’s consciousness—is a risk to the well-being of oneself, others, and the environment. Yet, to consciously focus on developing ourselves can become our greatest asset. Years ago, Abraham Maslow pointed to the dangers of unconsciously using the tools available to us:

First, you must be a good person and have a strong sense of selfhood and identity. Then immediately, all the forces in the world become tools for one’s own purposes. At once,



they cease to be forces that cause, determine, and shape but become instruments for the self to use as it wishes. The same principle is true for money. In the hands of a strong and good person, money is a great blessing. But in the hands of weak or immature persons, money is a terrible danger and can destroy them and everyone around them. The identical principle is true for power, both over things and over other people. In the hands of a mature, healthy human being—one who has achieved full humanness—power, like money or any other instrument, is a great blessing. But in the hands of the immature, vicious, or emotionally sick, power is a horrible danger.³⁶

In accord with Maslow's insight, research by Graves, Beck, and Cowan³⁷ has demonstrated that "people and organizations with a greater development of consciousness (able to disengage themselves from their own point of view and combine different perspectives into an integrated worldview) are up to *10 times* more creative and effective than their more traditional colleagues."³⁸ They call this developed capacity *Second-Tier thinking* and their cross-cultural research has confirmed the following:

With the shift toward Second Tier thinking the conceptual space of human beings is greater than the sum of all the previous levels [traditional, modern, postmodern, etc—see Part II] combined with a 'logarithmic' increase in degrees of behavioral freedom. Thus when individuals or groups thinking through [Second Tier] are given a task, they generally get more and better results while expending less time and effort. They often approach the activity in surprising ways others would not even have considered. This is more than efficiency; it reflects the activation of thus-far uncommitted brain-power... [Second Tier thinkers] tolerate, even enjoy, paradoxes and uncertainties... [they] are able to fix problems while others fret, manipulate, query higher authority, form study groups, or play theory games... [Second-Tier thinkers experience a] dropping away of the compulsions and anxieties (fear) from the previous levels, thus enhancing the person's ability to take a contemplative attitude and rationally appraise realities. As fear receded, the quantity and quality of good ideas and solutions to problems increased dramatically... [There is] an ability to learn a great deal from many sources, and a trend to getting much more done with much less energy or resources.³⁹

The practice of Integral Sustainable Development helps SDv practitioners hone and develop their Second-Tier capacities because it includes a focus on individual interior development. This inner work tends to strengthen one's ability to handle increasingly complex situations, hold contrasts, synthesize positions, dissolve paradoxes, create connections between ideas, understand others and oneself on increasingly subtle levels, and access information beyond the rational mind and exterior world.



Hochachka says that there is an “immense responsibility of development practitioners to work on their own self-reflection and expansion of worldviews—to engage without an egocentric/ethnocentric perspective.”⁴⁰ She cites Majid Rahnema—former Iranian Ambassador to the United Nations and executive board member of UNESCO—on the importance of SDv practitioners fostering self-awareness:

The most significant quality [of development work] is to be open and always attentive to the world and to all other humans... Attentive implies the art of listening, in the broadest sense of the word, being sensitive to what is, observing things as they are, free from any preconceived judgment, and not as one would like them to be, and believing that every person's experience or insight is a potential source of learning... Intervention should therefore be envisaged only in the context of a constant exercise of self-awareness.⁴¹

There may be no more powerful offering that we can bring to the world stage than action which arises from a deep awareness of who we truly are and how we are called to serve. It is thus our responsibility to consciously and continuously develop this awareness, which in turn will fuel the actions that manifest our greatest potential.

A Call to Action

“Like all frameworks, it is a simplification; the full diversity and richness...can be understood only by qualitative and participatory analysis at a local level.”⁴² In the end, the Integral Sustainable Development framework is a map, a collection of perspectives. It is of no use unless used to develop a deeper understanding of the territory, which includes ourselves. This, of course, requires discomfort, hard work, creativity, and a willingness to fail—all of which are foundational to SDv work. Members of the Integral Sustainability Center are drawing on this Integral approach to help provide a deep and broad overview of reality—and action strategies based upon grounded, multi-disciplinary research—which are truly useful



for development practitioners, humanity, and the environment. The Integral Sustainability Center is committed to providing numerous resources for this exploration, including: on-line workshops and collaboration facilities (www.integraluniversity.org), as well as training intensives (www.integralinstitute.org/seminars), and eventually accredited courses.

Most importantly, I invite you to test this material in the field, and then dialogue, debate, and suggest ways to make an Integral framework even more effective and useful. This material is intended to stimulate reflection and learning, as this is an inclusive and incomplete process, waiting for your involvement and feedback. Your presence is not only welcome, it is essential.

I leave you with this clarion call. The Millennium Development Goal (MDG) for poverty calls for a 50% reduction in the proportion of people living in extreme poverty by 2015. The MDG for environmental sustainability and regeneration calls upon us to effectively reverse the current trends in the loss of environmental resources at both global and national levels by 2015. Both of these visions are achievable, yet will require SDv leadership in all corners of the globe, in all sectors of society. In the words of Dr. Nancy Roof, co-founder of the United Nations Values Caucus:

For world transformation, we need self-aware Integral leaders committed to the global common good, who are familiar with the steps and stages of natural evolution in its four universal perspectives. They can design global economic and political structures (LR), facilitate inter-group processes for global solidarity (LL), provide space for individuals to grow and flourish (UL) and practice right action (UR).⁴³

This is our opportunity. This is our challenge. This is the future we will share with all life. May we respond well, sourcing our compassion, insight, and action from the interwoven, infinite depths of our Heart, Mind, and Spirit. May we witness the end of the age of fragmentation and the beginning of an Integral age.



¹ Annan, 2002

² Tibbs, 1999, pp. 15, 5, & 21

³ Silos, 1999, p. 9

⁴ Beck, 2002, p. 2

⁵ **Political definition** of sustainable development from: *Our Common Future*, the 1987 report from the World Commission on Environment and Development, which is commonly referred to as *The Brundtland Report*, in honor of the commission's chairman, Gro Harlem Brundtland. **Systems definition** of sustainable development from: Meadows, 1992. **Economic definition** of sustainable development from Daly & Cobb, Jr., 1989.

Ecological definition of sustainable development from Ehrlich, et al., 1977.

⁶ The predominant methodologies and frameworks for sustainable development are: The Brandt Equation from the Brandt21 Forum, ISO14001, CERES, World Business Council for Sustainable Development (WBCSD), Natural Capitalism, Gunter Pauli's Zero Emissions Research and Initiatives (ZERI), Factor X, Wackernagel's Ecological Footprinting, Life Cycle Analysis, various forms of TQEM (total quality environmental management), Elkington's Triple Bottom Line, the Swedish Natural Step, Robert Gilman's "five capitals" (human, social, natural, manufactured and money capital) and a related approach used by Jonathan Porritt at the UK-based Forum for the Future, Bhutan's Gross National Happiness Index, Canada's Genuine Progress Indicator, and both the "BITE" framework (biophysical, institutional, technical and ethical dimensions) and the Sustainable Livelihoods approach being used by UK's Department for International Development. [Frameworks compiled from research that included: Society for Organizational Learning, 2001, and Tibbs, 2002]

⁷ Examples of divergent justifications for pursuing sustainable development include: It's our responsibility as good citizens; Human society is faced with imminent collapse and possible extinction; We must preserve our way of life; Pollution and poverty are sins against creation and we must steward this Eden on earth; It is in our strategic interest to protect against future crisis; The company will be far more profitable and secure in the future; If I don't, my family won't eat; The organization must be ISO14001 compliant to compete effectively; It is a daunting technological challenge that will stretch our limits and bring us great rewards; The global human and natural systems are out of balance and need refining; If we don't, the gods will be angry with us; All humans deserve a fair opportunity to pursue their dreams; Our grandchildren will suffer if we don't act; We are "one" with everything, and thus the destruction of Gaia and existence of abject poverty only hurts ourselves; It is in the interest of national military and economic security; We are all interdependent threads in the imperiled web of life; It's our karma to alleviate all suffering everywhere.

⁸ Kent, 2002, p. 1

⁹ iSchaik Development Associates are consultants to UNICEF, The World Bank, the UK's Department for International Development (DFID), and the European Union.

¹⁰ P. van Schaik, personal communication, November 15th, 2003

¹¹ van Schaik, cited in Wilber, 2000, p. 99. For papers written by Paul van Schaik concerning his experience applying the Integral framework to international development for the past decade, see the Integral Sustainability Center website (www.integraluniversity.org).

¹² See Wilber's Collected Works, www.shambhala.com

¹³ For applications of Integral Theory to more than two dozen disciplines, see the Integral University website. Examples of Integral Theory applied to sustainable development include the following, available on the Integral Sustainability Center website:

Hargens, 2002

Hochachka, 2001

Eddy, 2004

¹⁴ Wilber, 2001, p. 2. By "Kosmos", Wilber is referencing the traditional term introduced by the Pythagoreans which originally meant the "patterned nature or process of all domains of existence, from matter to math to theos, and not merely the physical universe." [Wilber, 1996, p. 38] Thus Kosmos refers to both the exterior physical universe—which we commonly call the cosmos—plus the entire interior realms of consciousness and culture.

¹⁵ Wilber, forthcoming 2004, pp. 7-8



¹⁶ For a deeper explanation of the Integral framework, see its description on the Integral Institute website: <http://www.integralinstitute.org/approach.htm> and <http://www.integralinstitute.org/history.htm> and Wilber's *Introduction to Integral Theory and Practice: IOS Basic and the AQAL Map*, (2005, AQAL: Journal of Integral Theory and Practice Vol. 1 No 1 pp. 1-45?). For further correlation of the framework with sustainable development, see advanced papers on Integral development on the Integral Sustainability Center website.

¹⁷ Wilber, 2004, p. 11

¹⁸ Wilber, 2004, p. 11, and Wilber, 2004, p. 22

¹⁹ Additionally, this comprehensive approach must integrate these sustainable development tools and techniques so that they work synergetically, and not at cross-purposes. Part II, which looks at values and developmental levels, will begin to give insight into how to integrate different approaches, and when it is appropriate to use which tool.

²⁰ Esbjörn-Hargens, 2004, p. 29

²¹ Hochachka, 2005

²² McEwen, 2004

²³ Esbjörn-Hargens, 2004, p. 11 and 14

²⁴ Hochachka, 2005

²⁵ Hochachka, 2005

²⁶ McEwen, 2004

²⁷ Esbjörn-Hargens, 2004, p. 11 and 14

²⁸ Just as support groups help cancer patients to live longer, community members (and development practitioners) may remain engaged and deepen their investment in a sustainable development project if they have a support group.

²⁹ Hochachka, 2005

³⁰ Hochachka, 2005

³¹ Esbjörn-Hargens, 2004, p. 11 and 14

³² Wilber, 2000, pp. 72 and 74

³³ Thanks to Thomas Goddard for the structure of this example from his *Integral Healthcare Management: An Introductory Overview* (AQAL: Journal of Integral Theory and Practice Vol 1 No 2).

³⁴ An entire discipline called Integral Practice exists which studies how to accelerate and deepen one's interior process using a full-spectrum of tailored approaches to consciousness development. See the Integral Practice Center website, accessible through Integral University.

³⁵ Esbjörn-Hargens, 2004a, p. 4

³⁶ Maslow & Stephens, 2000, p. 146

³⁷ Beck & Cowan, 1996

³⁸ Referring to *Spiral Dynamics*, cited in Kofman, forthcoming 2006

³⁹ Beck & Cowan, 1996, pp. 276-8 and p. 66

⁴⁰ Hochachka, 2005, p. 14

⁴¹ Rahnama, 1997, cited in Hochachka, 2005, p. 14.

⁴² DFID, 2004, p. 1

⁴³ Roof, 2003, p. 9

REFERENCES

Annan, K. (2002). From Doha to Johannesburg by way of Monterrey: How to Achieve, and



Sustain, Development in the 21st Century. Speech at the London School of Economics, 25 February 2002. Retrieved February 20, 2004 from:

<http://www.johannesburgsummit.org/html/documents/documents.html>

Beck, D. & Cowan, C. (1996) *Spiral Dynamics: Mastering values, leadership, and change*. Oxford: Blackwell.

Beck, D. (2002, January 24). *The Africa Institute: An Integral Initiative*. Global Values Network. Retrieved September 2004, from

www.globalvaluesnetwork.com/00ArticleContent.asp?aid=30.

Brundtland, H. (1987) *Our common future*. Oxford: Oxford University Press. For the World Commission on Environment and Development.

Daly, H.E., & Cobb, Jr, J.B. (1989). *For the common good*. Boston: Beacon Press.

DFID; *Sustainable livelihoods guidance sheets*, Retrieved February 15, 2004 from

www.livelihoods.org/info/info_guidancesheets.html

Eddy, B. (2004). *Cybercartographic indicators in mapping sustainable development indicators: An integral perspective on sustainability, development and well-being*. 2004 PhD thesis proposal, Department of Geography and Environmental Studies, Carleton University, Ottawa, Canada.

Ehrlich, P. R. (1977). *Ecoscience: Population, resources, environment*. San Francisco: W. H. Freeman.

Esbjörn-Hargens, S. (2004). Integral Ecology: Frequently Asked Questions, in Integral Ecology Center Knowledge Base, Integral University. Retrieved December 15th, 2004 from



www.integraluniversity.org

Esbjörn-Hargens, S. (2005). Integral ecology: The what, who and how of environmental phenomena, in *World Futures Jan/Feb* pp. 1-45.

Hargens, S. (2002, Summer). Integral development: Taking the middle path towards gross national happiness. *Journal of Bhutan Studies*, 6, 24-87.

Hochachka, G. (2001). Integral community development in San Juan del Gozo, El Salvador: Including communities, ecosystems and 'interiority' in the developmental process. Unpublished Masters Thesis, University of Victoria, Victoria, British Columbia, Canada.

Hochachka, G. (2005). Integrating interiority in community development. *World Futures: Journal of General Evolution*. Jan/Feb.

Kofman, Fred; *Metamanagement – Principles*; forthcoming 2006, p. 15 of introduction.

Kent, R. (2002, August). Humanitarian futures and adaptive failures. *Journal of Conflict, Security and Development*, 2(3), 67-92.

Maslow, A.H. (2000). In D.C. Stephens (Ed.); *The Maslow business reader*. New York: John Wiley & Sons.

McEwen, C. (2004). *Exploration on sustainability, communication and consciousness*. Unpublished Master's Thesis, Responsibility and Business Practice MSc, School of Management, University of Bath, and the New Academy of Business, UK. From Integral Sustainability Center, Integral University.



Meadows, D. H., Meadows, D. L., & Randers, J. (1992). *Beyond the limits: Global collapse or a sustainable future*. Post Mills, Vermont: Chelsea Green Publishing.

Rahnema, M. (1997). Signposts for Post-Development. *Revision: A Journal of Consciousness and Transformation*, 19 (Spring), 8-9.

Roof, N. (2003, spring). Editorial. *Spirituality and Reality*, 2.

Silos, M. (1999). The politics of consciousness: Integral theory and Caribbean development. Retrieved September 15, 2004 from <http://www.integraluniversity.org>

Society for Organizational Learning, *Integrating Frameworks for Sustainability (DRAFT)*, Retrieved February 15, 2004 from http://www.solonline.org/public_pages/comm_SustainabilityConsortiumCore/

Tibbs, H. (1999). Sustainability. *Deeper News, January 1999*. Retrieved February 22, 2004 from <http://www.hardintibbs.com>

Tibbs, H. (2002). Saving the world slowly: Impressions of the United Nations world summit on sustainable development in Johannesburg, South Africa. Retrieved February 12, 2004 from www.susiladharma.org/images/un-wssd-htibbs.pdf.

Wilber, K. (1996). *Sex, ecology, spirituality*. Boston: Shambhala.

Wilber, K. (2000). *A brief history of everything, 2nd edition*. Boston: Shambhala.

Wilber, K. (2000). *A theory of everything: An integral vision for business, politics, science and spirituality*. Boston: Shambhala.



Wilber, K. (2004). The Integral Vision of Healing. In *Consciousness and Healing* Ed. Schlitz, M. et al. St. Louis, MO: C.V. Mosby.

Wilber, Ken. (Forthcoming) Introduction to Integral theory and practice: IOS basic and the AQAL map. *AQAL: Journal Of Integral Theory and Practice*.