

On the development of beliefs vs. capacities

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Abstract: I argue for an increased focus on skills and capacities vs. beliefs and values in the dissemination and application of integral theory. I show how clarity in differentiating skill vs. belief aspects of developmental theory clarifies certain issues. For example, the "mean green meme" can be attributed to pre-green (pre-conventional or conventional) levels of consciousness or skill development being attracted to the surface features of post-conventional cultural belief systems. The article explores the benefits and drawbacks of integrally-informed approaches to promoting skills vs. beliefs outside of the integral community. I describe how the approach suggested exemplifies the wisdom skills implied within Integral, second tier, or post-metaphysical stages of development.

Keywords: integral theory, development, wisdom-skills

Introduction

In this article I explore the questions "in furthering any integrally informed vision of humanity, is it more important to focus on changing what people *believe* or what they can skillfully *do*?" The question is an overly simplistic and thus rhetorical one—a way to point to key issues and spur inquiry, because clearly *both* good ideas and the capacity for good action are important. The question is also simplistic because belief and skill are mutually entangled. Yet the question is an important one for us to inquire into. I will argue that within the community of integral scholars and practitioners (henceforth "the integral community," loosely defined, and in which I am a participant) there is an overemphasis on the beliefs (including world views and models) that people hold and an under-emphasis on skills or capacities, at least within the narratives and mental models we employ as we discuss and disseminate our work. Addressing this overemphasis amounts to having a particular relationship *to* our beliefs about development.

This relationship to belief involves the capacity to understand more deeply what beliefs

(and knowledge) are—how they are formed and their fallibilities—as we decide how best to employ them. This leads to the second question addressed in a companion article in this volume: "What relationship to belief (and knowledge, truth, and certainty) might be characteristic of integral or second tier consciousness?"² Having a second tier relationship to beliefs entails (among other things) building a deeper reflective understanding of those specific beliefs *and* of belief (and knowledge) in general. This helps one evaluate what a belief is good for and to whom one should disseminate a belief.

There are strategic reasons to advocate for re-evaluating our mental models or narratives of development, and shifting a bit away from belief-centric toward skill-centric ones. For example doing so may improve the dissemination, adoption, and impact of integral theories *outside* the integral community. But this article also aims to support a deeper clarity and discernment *within* the community around when we choose to focus on skills vs. beliefs. Thus my goal is to support a more sophisticated perspective on belief-holding itself, and to more clearly turn our belief holding and belief promoting activities (and our concepts, models and theories) into objects of inquiry and reflection (that "we have rather than them having us" as Robert Kegan might say (Kegan, 1994). This amounts to supporting more construct-aware capacity (Cooke-Greuter, 2000) in integrally informed work, i.e. to have our ideas *about* integral theories *come through* a more integral or second tier perspective (and, in a sense, more deeply practice what we teach).³

In this article I am interested in how integral ideas are held and shared, and am not commenting on the content of any particular theory. How certain are we of our theories and how self-critical and open to alternatives are we? With what attitude and performative force do we promote the integral framework or values? Though few in the community of integrally informed

scholars and practitioners are rigidly dogmatic about their beliefs, the reader might easily acknowledge that there is a large variation in the certainty, attachment, or urgency with which integralists hold their beliefs. Integralists do quite well, relatively speaking, in bracketing their beliefs with caveats like "the map is not the territory," and in emphasizing multiple perspectives on any issue. But, as we will see, we can and should move even further in the direction of a more reflective and construct-aware relationship to the models and theories we use and promote.

Having a reflective and discerning relationship to our beliefs *within* the community is important because it amounts to practicing what we preach, it supports subject-to-object developmental capacity, and it leads to higher quality knowledge building. Having a reflective and discerning relationship to our beliefs as we disseminate them *outside* the community helps us respectfully reach across to other world-views and communities to meet them where they are, and to listen to and learn from others through deeper action inquiry and service.

In this article I will use the distinction between belief and skill to look at how *developmental models* are used, communicated, and promoted in the integral community. I will mention some of the problems with belief-promotion as opposed to skills-support. Having made that argument, I also acknowledge the importance of disseminating integral beliefs and ideas. In a companion article "A post-metaphysical approach to second tier skill and belief" I suggest some post-metaphysical approaches to belief and idea dissemination that help us align theory and practice in integrity.⁴ In that article I describe several concepts, including negative capability, epistemic drives, and meaning-generative claims, that can contribute to a post-metaphysical orientation to Integral Theory.

Preliminaries: defining skill and belief. I will offer working definitions of skill and belief as they are used in this article. Defining key terms in theoretical work is an awkward but

necessary task. Understanding why this is the case is actually an aspect of applying construct-awareness, one of the skills I emphasize later in the article. (From cognitive and linguistic studies we know that concepts are not structured or actualized in rule-like or definition-like ways. They are "sliding" or "floating" signifiers with fuzzy boundaries that move based on context and perspective. See Derrida, 1976; Lakoff & Johnson, 1999).

For our purposes we define *skills* as the ability or capacity to do something (the doing can be within thought or behavior). In Dynamic Skill Theory Kurt Fischer defines a skill as an individual's capacity to control and coordinate elements of behavior, thinking, and/or feeling within specified contexts (Fisher, 1980). Skills are tied to the type of situation or task they apply to. Importantly, skills are *unconscious* mental structures. One may have the skill to be a good conflict mediator without having a clue about how to explain or teach this skill verbally. Alternatively one may have a theory or explanation of what conflict mediation entails without actually possessing the skill. Once we have mastered a skill it expresses itself more or less automatically, without conscious thought or symbolic representation.

The term "skill" has several common uses. It is sometimes used to differentiate mundane or rote skills vs. more abstract knowledge, as in the distinction between "training" for skills and "educating" for knowledge. In contrast, the skills we are interested in are higher order mental skills, what some would call capacities, capabilities, "skillful means" or even "wisdom skills" that include both cognitive skills and social/ethical/emotional skills—for example systemic thinking, ego awareness, critical thinking, construct-awareness, leadership and communication skills, and empathic ability.

For the purposes of this article *beliefs* are ideas that we hold to be true or valid. Beliefs often include values—ideas about what one believes is good or right. Beliefs, in contrast to

skills, involve *conscious communicable* (verbal and symbolic) structures. For our purposes (herein only) "beliefs" does not include unconscious or "shadow" beliefs (and values) that impact our actions but which we are unaware of. Herein, beliefs are what we profess to know and value, as in Argyris's (et al., 1985) distinction between espoused theories vs. theories-in-use. Beliefs include espoused knowledge (but not tacit knowledge, which is closer to skill). "World-views" are systems of beliefs and in this article are included in the category of beliefs.⁵ Again, these definitions are imperfect but good enough to make our points below (in the companion article I return to investigate the indeterminacies in the definitions of skill, belief, and knowledge).

Developmental Narratives Based on Belief Systems vs. Skill Sets

Integral theories of human development. Perhaps the most prominent big idea or foundational principle within integral theories (broadly construed) is that human capacity, along with everything else in the universe, develops or evolves, and does so in ways that are now partially understood. Along with this is a common belief that this evolution (often described as being towards increasing complexity and connectivity) is quasi-teleological or spiritual (or soteriological)—that the cosmic progression of matter, which begot life, and the evolution of life, which begot consciousness, and the evolution of consciousness through human history, are all pointing toward something ever more adequate, more in-spirited, more wonderful, or, at the teleological extreme, cosmologically *meant* to be or *wanting* to become. The predominant integral narratives, which I assume my readers know well, describe a sequence of levels of worldviews, value-systems, and/or capacities that people (cultures or individuals, depending on the model) pass through if conditions are right.⁶ In alignment with the concept of multiple intelligences put forth by Gardner (1983), integralists posit a variety of lines of development (see Wilber, 2006). Along with this is a valuing of higher states and stages of consciousness to the

extent that they contribute to meeting important human needs and advancing human potential.

There are many variations to this basic integral developmental/evolutionary narrative, and substantial differences in the degree of empirical evidence supporting these variations. My purpose here is not to argue for or against this predominant developmental narrative—I hold it myself, if lightly, as something that has an uneasy role between tentative scientific theory and useful story or chosen mythology. I will not belabor the importance of trying to keep clear the is/ought (fact/value) distinction, and not commit the naturalistic fallacy or the moralistic fallacy, as has this been adequately argued for by Zachary Stein (2008).⁷ I will make explicit some values that are underlying assumptions and motivations of the article. For the purposes of this discussion I will not question integralists' prescriptive assumption that there is moral/ethical/spiritual validity in the general goals to not only study and understand human development but to support it toward the ends of helping people become somehow happier, wiser, more spiritually enlightened, or more adequately skilled to address the personal and global problems they face.⁸ I also am in agreement with a common element in these narratives which states that humanity faces a number of urgent and complex challenges at this moment in history and that new ways of thinking and new levels of consciousness are required to address these challenges. However I argue that what is needed is to make skill building the primary end, and that the inculcation of beliefs (including models such as AQAL, Spiral Dynamics, or metaphysical theories of the Self) should be seen more clearly as means rather than ends of activism and outreach.

One of Wilber's great contributions was the integration or coordination of developmental perspectives of human capacity with evolutionary perspectives on socio-cultural change—the developmental perspective being represented by the skill-oriented frameworks mentioned above,

and the evolutionary framework begin represented by the belief/value oriented frameworks. Wilber brought attention to common themes between individual development (as studied by cognitive psychologists) and collective evolution (as studied by sociologists and anthropologists), and in so doing enriched the insights and meaning-generative ideas available to both areas of study.⁹ However, the fact that individual development and collective evolution work through very different mechanisms is often lost on integralists, who often confuse or misapply the properties or processes of the individual vs. the collective, or development vs. evolution (see Roy, 2013). This is relevant to our discussion because individual development is primarily characterized by skills, and cultural evolution or change is primarily characterized by beliefs (and values; i.e. memes), and the two are often conflated in integral narratives of development.

As indicated above, I will distinguish two types of narratives that are often woven together in integral treatments of development, one involving *beliefs*, worldviews, and values, and another involving *skills* and capacities. Though both types of narrative are important, the predominance of the first is potentially troublesome. I propose that we need to (1) hold a clearer differentiation between these two dimensions of development, (2) properly frame the belief-centered ones to mitigate their problems, and (3) make more use of skills-based frames.

Below I will refer to the work of several prominent integral thinkers (including Wilber, Beck, Cohen, Torbert, and Cook-Greuter, and McIntosh). The ideas being put forth by these scholars include both descriptive/explanatory theories of how mind, culture, and growth work, and prescriptive notions about what we ought to strive for. I will describe the work of Andrew Cohen, Don Beck, Steve McIntosh, and Nancy Roof's Kosmos journal, as promoting variations *beliefs* related to an integral worldview. Then I will mention the works of Robert Kegan, Bill

Torbert, Kurt Fischer, and Suzanne Cook-Greuter, and others oriented to *skills* and capacities. I also mention Ken Wilber's AQAL model, which has both belief/worldview and skill/capacity aspects.

Before giving these examples one thing should be made clear. All of the thought-leaders mentioned are engaged in projects that are helping people build important cognitive, social/emotional, and spiritual capacities—i.e. skills. My focus here is on the narratives, ideas, or mental models that get communicated within and beyond the integral community. In most cases the skill development supported by these thought leaders is an important and recognized byproduct of their work, but is not an *explicitly worked out* component of how the work is described or enacted in publicly available texts and dialogs.

Cohen & Hamilton's Evolutionary Enlightenment. Spiritual leaders Andrew Cohen and Craig Hamilton (one time student of Cohen) promote a grand "evolutionary context" in which "who and what God is can no longer be taken as fixed—that from a developmental perspective, God is *also* evolving, just as we are" (Cohen & Wilber, 2006, p. 69). Cohen argues for a belief system that puts humans at the forefront of the evolution of consciousness itself. To deeply experience ourselves in this way (or to experience this inherent aspect of our nature), he argues, gives access to the motivation (ecstatic impulse) to break free of our egoic and narcissistic tendencies and align with a strong moral and spiritual sense of purpose and service.

This Context is more than a surface belief system for its adherents—it is a lived experience that deeply implicates self identity. Cohen's ecstatic impulse points to a powerful universally (though rarely) experienced felt sense or deep intuition that he attaches to a particular cosmic meaning-frame.¹⁰ This framework speaks of human capacities in spiritual and moral terms, but in general does not get specific about teachable and measurable skill sets in the way

that developmental theories allow for.¹¹

Kosmos journal. Kosmos is a major publisher of authors ascribing to integral and evolutionary developmental worldviews. The magazine (edited by Nancy Roof) has published a wide range of articles and interviews, and though many of these are *compatible* with the notion that human development is about developing *skills and capacities*, in a general sense the journal conveys a particular worldview (*belief system*) that has two components: one sounds the sharp alarm of impending global crisis, and the other plays the inspirational chords of hope, looking for solutions at the leading edge of human development. These two elements of the worldview are illustrated by the following typical quotes:

"The ever-multiplying sighs suggesting that the modern world [is] at the end of its tether."	[A] "new era of conscious co-evolution" that could harness an "appreciative approach to global inquiry and accelerated world learning."	Cooperrider, p. 9; Kosmos Vol. 6 No. 2, 2007
"Today we can say that we have a world political crisis...the world is even more dangerous than the world of the mid-1980's."	[We] "are witnessing the formation of a global civil society" that can be steered towards world preservation through dialog, a focus on common human interests, and mechanisms of coordinated decentralized power structures.	Gorbachev, p. 6-9; Kosmos Vol. 6 No. 2, 2007
"We live in an era of intense conflict and massive institutional failures, a time of painful endings and of hopeful beginnings [involving] the loss of norms and values and [the] breakdown of social structures."	[A] "new form of presence and power that starts to grow spontaneously from and through...networks of people...[and allows us to] "better sense and connect with a future possibility that is seeking to emerge."	Scharmer, p. 31, 33; Kosmos Vol. 6 No. 2, 2007
[Our] "current planetary hyper-acceleration...civilization has been careening out of balance for some time now...our leaders have lived in denial..."	"in the midst of a huge planetary shift in how people identify with 'otherness'...a compelling vision of inclusion and protection for all human beings..."	O'Dea, pg 5, 6; Kosmos Vol. 8 No. 2, 2009

These quotes are not meant to be fair representations of the core content of the articles they are taken from, but are selected to illustrate a common theme that runs through many of the 15-20 articles in each issue. The point is that, like much of what we see in the integral community, the magazine as a whole promotes a certain worldview—it enjoins us to see our personal and global situation in a particular way, one closely aligned with progressive spiritual and integral beliefs, with a goal to instill both urgency and hopeful action.

Beck & Cowan's *Spiral Dynamics*. Don Beck and Chris Cowan's text, a primary one in

the integral community, has several implied purposes. One is to *describe* a model of human development and evolution, originally proposed by Clair Graves, which has, for many, become a powerful meaning-making tool for understanding the psycho-social world. The second goal is to facilitate people in becoming adept at *using* the model.¹² The third goal is to *promote healthy development* within and up the "spiral" of development, as a means to create a better world. A fourth implied goal is to increase the degree of "*second tier*" consciousness in the world (the 7th and 8th v-memes and beyond), as only at these levels can one adequately understand the model and use it to promote healthy growth.

Because the theory speaks of developmental levels in terms of "core intelligences" it addresses skills and capacities—but it does so in a relatively imprecise and shallow way. Spiral Dynamics describes a developmental sequence of core intelligences or memes, that each "reflects a worldview, a valuing system... a belief structure, an organizing principle, a way of thinking or mode of adjustment [and is a] structure for thinking, not just a set of ideas" (Beck & Cowan, 1996, p. 4). It might appear that describing core intelligences in terms of *how* we think as opposed to *what* we think implies a focus on skills and capacities rather than on beliefs or worldviews. Yet the descriptions don't quite drive down to (or live up to) the operational level of skills. For example, at the higher developmental levels a "Spiral Wizard appreciates chaos and thinks more like a designer than an reengineer...links functions, people, and ideas into new, more natural flows that add precision, flexibility, rapid response, humanity and fun to getting the work done" (p. 3). The authors talk about and around skills without getting sufficiently specific about exactly what they are (or how to build them), and focus more on human drives, needs, motivation, and values than on skills per se. The book describes each meme in terms of response to life conditions (p. 56), concerns and priorities (p. 65), decision making style, education modes,

family dynamics, community interactions, and life space structures (p. 332).¹³ Each of these certainly imply skill sets. Yet, as someone trained in cognitive and learning sciences, I find the book missing a sufficient description of exactly what these ways of thinking *are*, as opposed to what they are *like*.

Beck and associates' training programs include a set of assessment tools for determining an individual's memetic level (Values Profile) and readiness to transform (Change State Indicator). The primary assessment presents subjects with a set of questions. Each question has a list of possible answerers designed to represent developmental levels; subjects rate the answers according to how closely each one reflects their own thoughts and feelings (from "most like me" to "least like me"). That this instrument is designed to measure beliefs and values is further evidence that the Spiral Dynamics framework is more oriented to these than capacities and skills.

Spiral Dynamics and similar theories imply that there are developmental skill sets necessary for holding each developmental worldview level. For example, being a second tier Spiral Wizard requires that one have the ability to objectify mental functions such as beliefs, values, and action logics to a systemic level of abstraction. Later I will argue later that the correlation between skills and beliefs is not as close as is assumed. Also we can note that learning a *model* such as Spiral Dynamics does not directly lead to a particular set of skills (as Beck readily admits), and the question of how we develop such underlying skills is left unanswered in Beck & Cowan's book.

McIntosh's *Integral Consciousness*. Steve McIntosh describes and promotes an emerging "integral worldview" and "integral consciousness [that is] a new perspective on the world that expands our perception of reality and provides fresh motivation to make a positive differences. This new way of seeing and living arises from and enlarged set of values framed by

an expanded understanding of cultural evolution" (McIntosh, 2007, p. 12). Similar to the other frameworks described above, McIntosh's worldview is described as a meaning-making framework that can "increase the scope of our awareness" (p. 15). Even more explicitly than Beck and Cowan, McIntosh is pointing to a belief system more than a set of skills. He claims that "[if] you read and consider the ideas in this book, they will literally raise your consciousness" (p. 17). Like Beck and Cowan, McIntosh alludes to skills and capacities, but does not describe them sufficiently to allow them to be evaluated or directly supported. For example he speaks of integral consciousness as having "a new way of arriving at creative solutions—a new epistemological capacity" (p. 89); of vision logic as being able to establish "networks of [higher creative relationships, with a] panoramic [apprehension of] a mass network of ideas [and] how they influence each other" (p. 90); of "dialectical evaluation" that "unlike reason or logic...is centered on volition rather than cognition [and is] informed by head and heart" (p. 90). He links integral consciousness to Robert Kegan's description of "the capacity to see conflict as a signal of our over-identification with a single system" (p. 91).

These are pointers to important skill sets, but only pointers. McIntosh describes his approach as arguing for a philosophical framework, and he does not claim to be describing skills. Yet for me the term "consciousness" in the book's title raises the issue central to this article: is consciousness (its development or its 'integral' or second tier manifestation) more about what one believes or one's skillfulness in action? The answer is not necessarily either/or, but we can do better to differentiate these two dimensions in our explorations.

The frameworks and worldviews mentioned above have served as highly inspiring, relevant, useful sense-making tools for me, and many others. Their description of culture in

terms of past and emerging worldview shifts is compelling, and I accept the prescription that the world needs more people to achieve an integral or second tier worldview or consciousness.¹⁴ My present analysis of these works is to point out an important element that is missing, i.e. skill/capacity orientation and articulation. In a sense one can not fault these authors for omitting skill-based analysis; it is difficult to do and benefits from specialized and relatively rare knowledge gained in the study of cognition and learning. Also, the study of adult developmental skills is still in its infancy and, being as much of an art as a science, there are limits to the depth, breadth, or precision of its application in many contexts. But knowledge and resources exist that allow for more skills-based approaches, and I suggest that they be more fully integrated into integral (and "evolutionary") narratives, given the potential problems with belief-based approaches that I outline in the next Section.

Wilber's AQAL Model. Wilber's substantial corpus of work refers to both beliefs, in the form of models, frameworks, and orienting generalizations; *and* to skills as he heavily references developmental theorists in some detail. Thus as a whole his approach does not have the same imbalance toward belief-promotion as those mentioned above. However, it is important to note that to the extent that integral or second tier capacity is described in terms of facility with the AQAL *model* (Wilber, 2006) as opposed to a set of *capacities*, as is the case in many applications of Integral Theory, such an approach may be over-emphasizing belief systems at the expense of underlying skills.

Skills-based approaches to development. Belief systems and skills are both interior phenomena, but a skills orientation is more closely connected with action (observable exteriors). Skills-based approaches are more useful than worldview or values-based approaches where the rubber of human psychological and spiritual potential meets the bumpy road of enacted life. Kurt

Fischer & Samuel Rose note that "most traditional...developmental research has centered on cognitive or socio-emotional development, not actions" (1999, p. 6). They take an alternative approach by focusing on skills defined by actionable tasks. Skills, even highly advanced developmental capacities, demonstrate their true merit in action contexts such as communication (including dialog, deliberation, and written communication), problem solving (including planning and design), decision-making, collaboration (including group dynamics), leadership (and parenting), and learning (including adaptation and self-improvement) (as Robert Kegan explored in *In Over Our Heads* (1994); and see Fischer's Skill Theory (1980)). Basing human growth and transformation efforts on skills facilitates clear goals, measurable outcomes, and the use of theoretically sound models of human learning and change.

The literature on the development of various human skills and capacities is vast and it is not our goal to summarize it here. Readers will do doubt be familiar with the lineage of developmentalists often mentioned by Wilber, beginning with Piaget and Baldwin, and including Kohlberg, Perry, Maslow, Loevinger, and Graves (Wilber 2000A; 2006). Contemporary developmental theories (and theorists) referenced within or working within the integral community include Kegan's subject-object theory; Cook-Greuter's and Torbert's ego development and action logic framework; and Dawson and Stein's work, which is based on Fisher's Skill Theory and Commons' Hierarchical Complexity Theory (Dawson & Stein, 2008).

Much of this work focuses on *defining and measuring* skills/capacities. For example Suzanne Cook-Greuter and associates specialize in assessing development in the area of ego-development (also described as meaning making capacity or "leadership maturity", progressing through a series of Action Logics) (Cook-Greuter, 2000). Cook-Greuter's published works are more about capacity assessment than capacity development, but her associate Terri O'Fallon,

through programs at Pacific Integral, has been co-developing a coaching and leadership program that speak more directly to transformational change and capacity building (including self-awareness, personal presence, assumption-questioning, collaboration and co-creative skills, innovative thinking and problem solving skills) (O'Fallon et al. 2008). Sarah Ross and Jan Inglis have applied Common's Hierarchical Complexity Theory to improve skills for group decision-making processes (Ross, 2005; Inglis 2007).

Other examples of skills-based frameworks include Bill Torbert's Leadership Development framework (which makes heavy use of Cook-Greuter's model) and Bill Joiner & Stephen Joseph's Leadership Agility framework (Torbert, 2004; Joiner & Josephs, 2007). Both groups are oriented toward building skill/capacity in communication, decision making, and leadership. Robert Kegan and Lisa Lahey's *Immunity to Change* (2009) applies developmental theory to personal and organizational transformation. They describe studies that show how developmental level of complexity correlates with problem solving, leadership, and relational skills.¹⁵ Michael Basseches and Otto Laske have published work exploring "dialectical thinking," which is described as a post-formal capacity (Basseches, 1984, 2005; Laske, 2009).

Wisdom skills. As indicated above, there are many frameworks that explore generic skills that we would call second tier, post-formal, integral, or post-rational that are applicable across all life contexts such as collaboration, communication, leadership, knowledge building, and parenting.. To give a sense of the scope and nature of these skills I will use a simple model I call "wisdom skills" that I proposed in Murray (2008). Wisdom skills are essentially the same higher level skills described by adult developmental theorists, organized into four intermeshing categories: ego-, relationship-, construct-, and systems-awareness.¹⁶ This is one of many frameworks illustrating the skills or capacities of interest to us:

- *Ego-awareness* (self/ego/will and being/spirit/essence) includes reflective awareness of one's identity and sense of self, social roles, fears and attachments, strengths and weaknesses, unconscious motives and shadow, and how one's emotional state effects one's thinking and actions.
- *Relational-awareness* (emotional/social/ethical/interpersonal intelligence) includes empathic skills, communication and collaboration skills, and the capacity for compassion.
- *Construct-awareness* (related to cognitive and meta-cognitive capacity) is about understanding the nature of mind, thought, knowledge, and the symbolic/linguistic, concept-forming and reality-forming functions of the mind. Includes metacognition (thinking about thinking), epistemic knowledge (knowing about knowledge), and awareness of the limits and fallibilities of the mind.
- *Systems-awareness* (related to "context awareness", another cognitive capacity) is about seeing the bigger picture of interconnections in any situation. It is about seeing dynamics, hierarchies, mesh-works, ecologies, fractals, dialectics, and past/present/future possibilities in a system.

I claim that supporting and building skills such as these is a more critical end goal of integral change-work than disseminating any particular model, world-view, or belief system (though, as discussed later, belief-formation is important for many reasons, including as motivation for skill building).¹⁷

Problems with Developmental Theories Oriented to Belief Systems

One implication of the above description of belief-centered vs. skill-centered frameworks is that the belief-centered frameworks would benefit by supplementing their approach with a deeper elaboration of skills and by referencing skills-based frameworks. But, in addition to a basic lack of precision or depth about the human capacities being promoted, there are other reasons to be cautious about belief and worldview centered frameworks, as discussed next.

The Green Meme as an example. To illustrate some problems of speaking of development in terms of worldviews and belief systems, lets take a close look at how Integral Theory critiques the postmodern level of psycho-cultural development, also called Green Meme.¹⁸ Much has been said in the Integral Theory literature about the "Mean Green Meme" and the psycho-social pathologies associated with the green developmental level (see Wilber, 2002;

2006). Included in the critiques are flavors of narcissism (sex, drugs and rock-n-roll), debilitating relativism (everyone is right), over-sensitivity (including political correctness), pathological inclusion (as in dysfunctional forms of consensus decision processes), performative contradiction (there is no ultimate truth—except this one), and its rejection of materialism, authority, hierarchy, and all things modern and traditional (orange and blue/amber memes). In decrying these problems all are clear to note that the green meme represents a positive set of capacities that emerge out of the needs established at the prior developmental level—as each level brings new strengths and new problems. But in the Mean Green Meme narrative there is a focus on the problematic aspects of green.¹⁹

The pluralist/individualist cognitive level associated with Green progressive and cultural-creative values includes several capacities (skill sets) that are advances beyond the linear-rational skills honed in the prior developmental level (Orange/Modernist). Green capacities include the ability to perceive complex systems and nonlinear process dynamics (including interpersonal dynamics as in Family Systems theory), ecosystems (natural, economic, etc.), and social structures (such as the military-industrial complex, structures of patriarchy, etc.). It also includes abilities to reflect on the self, on thought processes as they arise, on how meaning is generated, and on the interplay of multiple perspectives in human affairs. In part as a result of these skills, Green development also includes an empathic understanding of and connection to ever wider circles of others who might earlier have seemed as other. (All of these skills begin to emerge strongly at Green, but are not fully developed until later stages).

These are skills. We also associate certain *beliefs*, worldviews, and values with the Green Meme, including those related to environmentalism, human rights, egalitarianism, radical equality and freedom, inclusive forms of decision making and dialog, and new-age orientations

to spirituality and human potential. These *beliefs* or understandings could not have emerged culturally without a critical mass of individuals (especially thought-leaders) possessing the cognitive and social/emotional *skill* sets described above.

A key point is that, though having a certain critical mass of people at this developmental level, some have suggested 5 or 10 percent, is required for it to emerge as a stable self-replicating cultural phenomena, once that cultural meme emerges and establishes itself, individuals *from any developmental level*, and in particular developmentally prior levels, might be attracted to its worldview and values. And this is what we find. Many people who ascribe to Green Meme worldview assumptions and values and move within new age, political activist, or progressive circles do not seem to have the cognitive, self-reflective, or emotional intelligence capacities that are associated with the green level of skill development. Some are drawn in for pre-conventional narcissistic, authority-rebellion, or pleasure-seeking reasons (Red Meme). Some are attracted because new age culture reintegrates non-rational reasoning such as magical thinking (Purple and Red Memes) within its post-rational prevue—even though those individuals may have poorly developed rational (Orange) capacities. Some members of the green post-conventional worldview hold onto their beliefs with a rigidity implying a conventional (Blue Meme) skill set.

Wilber, in *Boomeritis* (2002) and elsewhere, was one of the first to clearly articulate this phenomena (which he calls the Mean Green Meme). But he attributes it to a pathological manifestation of green level consciousness, when it may be more accurate to describe it as pre-green (pre-conventional or conventional) levels of consciousness or development being attracted to the surface features of post-conventional cultural belief systems. Integralists often note how the green meme resists or rejects orange meme. This only happens in the realm of beliefs and

values. It is rare (and pathological) that, along the journey of skill development, to see someone reject skills developed at earlier levels—skills don't work that way (though a change in values might attract one to a community that does not appreciate or use certain skills).

So there is a confusion in our developmental narrative: is the "Green Meme" (or any other meme) really about worldviews and values or about skills and capacities? A trivial answer is that "Green Meme" is a term originally used by Beck and others to point to a worldview and value system. But in fact we (and Beck) use the term in a loose way that implicates certain developmental skills/capacities as well. The deeper question is, when one points to a developmental level in the context of critiquing or promoting it, what is it *most useful* to talk about or promote—belief systems or skill sets? Or, to put it less dualistically, for what purposes is each type of narrative most useful?

I will give one more illustration of how integralists conflate skill and belief within developmental narratives. Somewhere in the history of the development of the theory of Spiral Dynamics (I have not been able to determine the time) the model expanded from a theory about individual value and belief patterns, discovered by a psychologist (Clare Graves) through empirical trials, to also being one about the evolution of culture and value systems across historical time. This narrative offers a compelling hypothesis, but it has never been empirically validated. We have come to treat this rather detailed hypothetical story of cultural evolution with the same certainty that we treat the empirically supported theories of individual development. Also, as discussed above in our analysis of current psycho-social reality, we blur skill development with belief-formation, as if they track together, yet I am aware of no empirical study that demonstrates a correlation between level-as-skill and level-as-belief. I am not arguing that these associations are wrong, but that by more clearly differentiating when we are talking

about skills vs. beliefs we can avoid the error of transferring the certainty derived from empirical work onto more speculative areas.

Zachary Stein and Kattie Heikkinen have been conducting a series of assessments of John F. Kennedy University faculty and students in the Integral Theory program to evaluate the developmental level (in terms of hierarchical complexity *skill* level) at which individuals understand the key concepts and principles (*beliefs* for our purposes) of Integral Theory (Stein & Heikkinen, 2010; Stein, 2010). They have found significant variation in the skill level with which subjects hold (and are able to explain or justify) integral ideas. Their research demonstrates the often cited fact that that knowing about something is not the same as having the skills of application. Since Integral Theory is seen by many as a "second tier" set of principles and models, this is further evidence that the correlation between the beliefs and skills associated with any developmental level may be weak at best.

Problems with disseminating belief systems. A focus on belief systems and values is appropriate for analyzing large scale cultural change in societies for descriptive purposes; generating narratives to try to explain large trends, and making meaning of the complex phenomena that is culture. Understanding a developmental spectrum of belief systems is also useful in one's attempt to develop empathy for others and a critical reflection on one's own beliefs. But when the objective is to assess or prescriptively support the development of human capacities, an emphasis on values and belief systems can be problematic. If one's goal is to support the development of individuals and organizations that can more adequately address the opportunities and problems of their context or the larger world, wouldn't it be better to support skills (such as the ability to take many perspectives and the ability to objectively consider one's biases) than beliefs and values (such as that capitalism is dangerous, the personal is political, or

that Consciousness or god evolves through humans) or even teach models (such as AQAL or Spiral Dynamics)?

To illustrate, if I had a choice between trusting the decisions of a group with a Turquoise (second tier) skill set vs. a group with a Turquoise belief system I would choose the group with the higher skill set. I would trust as valuable whatever belief and value system that emerged from a group with solid second tier capacities, even if these beliefs differed from what integralists normally associate with second tier memes. I would tend to trust their decisions as wise, even if they differed from mine. On the contrary, I would not *necessarily* trust that a group that espouses to a Turquoise belief system and value set would have second tier skills nor make decisions that one would judge as second tier.²⁰ (I leave open the difficult question of how group beliefs or skills would be assessed.) Also, belief systems, more than skill sets, are susceptible to being purposed by unethical external influences.²¹

Beliefs are fundamentally perspectival, culturally bound, particular, and fallible. Beliefs have a natural tendency to support in/out-group formation (we naturally identify with others who share our beliefs, which can stimulate primitive human drives to "otherize"). People differ widely on what they believe and value, and the well-meaning goal of inculcating a particular belief system in others is, though not as wrong-headed as some postmodernists might claim, still potentially problematic. Skill promotion, on the other hand, is less problematic. The wisdom skills referred to above are generic, highly useful across a broad range of human contexts, and are "cognitive tools" not susceptible to being "wrong" per se. Unlike beliefs, skills can't disagree. Both skills and beliefs can be used for good and misused for evil, but not in the same ways. For example, I suspect that there is more danger that green *beliefs* will be appropriated to unacceptable or useless ends than that green level *skills* will be.²²

As Habermas points out, in the modern world one of the most important elements of belief-holding is how we are prepared to explain or justify our beliefs (Habermas, 1992). Behind every espoused belief is an implicit or explicit guarantee that we could back it up in some way. The spreading or adoption of beliefs is contingent on the validity claims or warrants behind them, and different individuals or groups emphasize different justification modalities. Ideas are believed for many reasons (or justification modalities), including the authority or trustworthiness of the source, coherence with other beliefs that one has or that one's group holds, rigorousness of methodology and logic, intuition, etc. There is a rough developmental progression in the sophistication with which one makes and understands justifications. Any deeper discussion about belief justification is beyond the scope of this text, but the point to be made is: the ways that one justifies one's *beliefs* is itself a *skill* (see Murray, 2011 for further discussion). Similarly, the certainty and rigidity with which one holds beliefs is skill-based. Higher development in context-awareness and construct-awareness implies more flexible and self-reflective belief-holding.

Learning skills vs. changing beliefs. Unlike skill sets, beliefs-systems can become ideologies and dogmas. The potential for unintended consequences, such as people being attracted to ideas for the wrong reasons, misunderstanding and abuse of a theory, and calcification and entrenchment, is greater in promoting belief systems than in supporting wisdom skills. Beliefs can be changed with impassioned and charismatic speeches, propaganda, peer pressure, induced experiences of extreme states or emotions ("whipping the crowd up" into ecstasy or dread), or the force of a good argument. Skills cannot be transferred or transformed in this way—they develop gradually through education and experience, practice and feedback. While changing a belief often takes time and effort, beliefs can also have a mercurial quality (as in the depraved rock-n-roller who is "born again" and suddenly converts to fundamentalist

Christianity, denouncing the excesses of his spurned colleagues). Skill attainment is more methodical and never mercurial or sudden.

Even though both belief system promotion and skill set support may require substantial effort, the *design* of skill set support is more difficult and requires more expertise and precision. This is one reason that development is more often described in terms of belief than skill change. Supporting development of skill sets requires analyzing general capacities and target behaviors in terms of specific behaviors and skills, and then determining how each skill is to be supported or taught. Methods for the inculcation of belief systems have been around for thousands of years, and can be seen in their most insidious forms in marketing and political ads. The methods include impassioned rhetoric, story telling, argumentation, ad-hominem attacks, the manipulation of metaphors, etc., many of which work on relatively primitive parts of the mind. In contrast, our understanding of skill acquisition and cognitive support is relatively recent.

The value of belief systems. Now let us argue from the other side, in *support* of the importance of spreading integrally informed world views, values and beliefs. Beliefs influence motivation, attention, and intention. Skills and capacities are like tools which are impotent until called to action in the service of some goal or vision. The energy to use a skill often comes from belief-based commitment and enthusiasm. In short, our beliefs are what drive us to use our skills to take action (or not). In a sense, capacities and skills define where one is coming from while beliefs and values determine where one is going.

Shared world views form stable bases for new levels of emergence and cultural evolution. Alignment of beliefs and goals enable collective synergetic action, which can be orders of magnitude more effective than poorly coordinated individual action. The power of story, myth, and narrative in human affairs is widely acknowledged, as is the psychological need for deep

meaning and purpose, which is at risk in the existential ennui of postmodern society. One's belief system is strongly related to the phenomena of *hope*—an essential ingredient to for those who must persevere in change agency projects in the midst of difficult situations. Certain beliefs, if shared, might support the ethical goals of humans feeling deeply connected to each other and responsible for the fate of the planet.

Beliefs can motivate one to learn or improve skills. It could be argued that people need new belief systems before they are ready to learn new skills; that belief systems explain why a skill is pragmatically or ethically important, and also provide the context for the social interactions that allow for learning, practice, and skill development. Belief and skill are interrelated and their support needs to be woven. For integralists at least, there is a chicken-egg phenomena at work, suggesting that attention needs to be balanced on both sides: belief and skill. As was argued with the Green Meme example above, to take on an integral (or "evolutionary") world view *as it is intended to be interpreted and put to use* requires a certain sophistication (skill) in thinking about systems, self, and other.

In his article "Movement Building Through Metanarrative" Jordan Luftig speaks to the importance of one's choices in story telling and narrative, specifically how one frames "I" and "we," as essential elements of taking leadership in the "emerging integral movement." He recommends that integralists embrace the ideological aspects of Integral Theory more explicitly and self-reflectively, and see AQAL principles as a source of "ideas that can be converted to levers to grow the integral movement and contribute to the transformation of society" (Luftig 2009, p. 47). As Jordan seems aware of both the value and the risk of this approach I am supportive of his argument because, even though I caution against focusing on belief-oriented narratives about human development, what is even more important is that we take a reflective

(and pragmatic, critical) stance on how we hold our beliefs. Luftig's call for more self-awareness about belief-holding and belief-promotion contains half of my argument to better differentiate and understand the nature of skills vs. beliefs.

In sum, the importance of beliefs and world views is thereby acknowledged. Nothing (much) would come from people without beliefs and their energizing and focusing force. The integral, transformative, and evolutionary visions laid out by the integrally-informed leaders mentioned earlier are, in my opinion, high quality compelling belief systems with the potential to move culture and consciousness in the directions humanity needs to go. In this article I am arguing that overall in the integral community we focus too much on beliefs, values and world views, and not enough on skills and capacities—but we don't want to throw out babies *or* bathwater, just supplement the tub with important ingredients.

From beliefs and skills to knowledge, models, and theories

Our analysis of belief-based vs. skill-based narratives about human development is one example of apply construct awareness to take an epistemic distance on one's beliefs. In a companion paper "A post-metaphysical approach to second tier skill and belief" (this volume) I explore these themes in more depth. One of the principles explored is "indeterminacy analysis," which involves supplementing or wrapping a theory or idea with a discussion of assumptions made about concept definitions and central exemplars, and how the conclusions or claims degrade or change as exemplars or definitions vary from central assumptions. This section includes a type of indeterminacy analysis of the ideas on beliefs and skills presented earlier in the paper. I will offer a more nuanced definition of skill, belief, and related concepts.

I mentioned above that there is a layer of complexity hiding behind the simple belief vs. skill categorization, and in some ways my arguments thus far have involved somewhat of a

caricature of these two dimensions of thought. The reader may have experienced a dissatisfaction in the way I lumped all beliefs together, regardless of rigor or quality, and used terms such as belief and world-view, which tend to highlight the subjectivity and fallibility of ideas, rather than terms such as theory and knowledge, which point towards more rigorous or valid kinds of ideas.

Knowledge has been defined by some philosophers as "justified true belief"—knowledge is assumed to be more accurate and objectively true than belief. However this definition has been shown to be inadequate from a rigorous philosophical perspective (see Edmund Gettier, 1963). It is, of course, crucial to consider the accuracy and objective validity of many of the beliefs we refer to within the integral community—empirical and scientific evidence for claims should be highly valued. However, many of the philosophical and theoretical ideas discussed within the integral community are difficult to treat as facts or empirically provable hypotheses, and must be assumed to occupy an uneasy position between factual knowledge and subjective speculation (later we will call this territory "meaning-generative"). The ideas espoused by integralists are controversial in some circles, and misunderstood or misapplied in others, so all of the caveats and concerns mentioned above for "beliefs" apply to integrally informed "knowledge." It remains important to apply second tier belief-holding skills to integral knowledge.

We can refine the simplistic belief (and worldview) vs. skill (and capacity) dichotomy as in Figure 1, which illustrates several constructs related to belief and skill, including knowledge, models, values, and meta-knowledge. As mentioned above, a primary characteristic of beliefs and worldviews (only in the sense used here) is that they are or can be verbally stated, i.e. we refer to *espoused or explicit* beliefs (and systems of beliefs that are world-views). In contrast, skills and capacities are tacit (automatic or non-conscious theories in-use or as-enacted)—we may or may not be able to verbally describe our skills. The terms in the middle of the figure,

including values, theories, knowledge, and meta-knowledge, are used in different ways, sometimes referring to the explicit, sometimes to the tacit, and sometimes to a combination of the two.

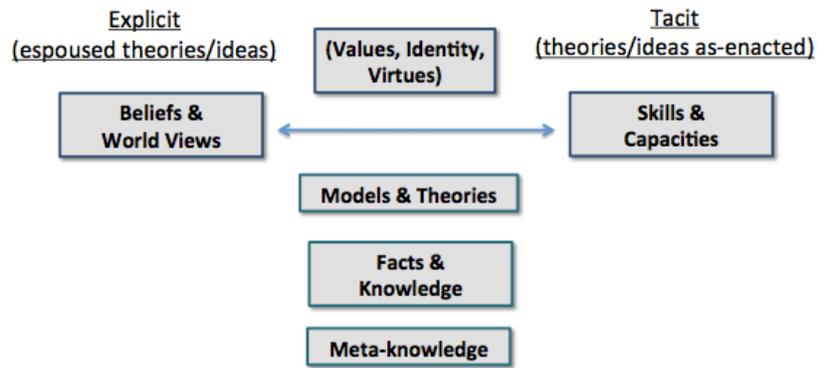


Figure 1: Constructs related to beliefs and skills

Integralists, and most scholars, insufficiently differentiate tacit vs. explicit knowledge (see Harry Collins, 2010, for a deep treatment of tacit vs. explicit). For example, worldview, values, identity, and virtues (Figure 1) can refer to something one espouses *or* to something one embodies but is unaware of. I might say that I value peace and justice, but reveal quite different values through my actions and decisions. Similarly, the term "knowledge" is often vague in terms of whether it refers to the tacit or explicit. Think of the expert (skilled) tennis player who can't explain (espouse) what she does; vs. the bookish tennis fan who "knows" everything about tennis but cannot skillfully play it—both might be said to have tennis knowledge.

Models and theories can also refer to tacit or explicit knowledge (but it is usually more clear from the context which is referred to). We have already referred to Argyris's (1985) distinction between espoused theories vs. theories-in-use. One can have a tacit "mental model" of, e.g. how an automobile works or what motivates human behavior, that deeply informs one's decisions—yet struggle to explain how those decisions were made. Models such as AQAL and

Spiral Dynamics are explicit—one can describe them but may or may not embody their principles in action.²³ Meta-knowledge, or knowledge about knowledge, includes meta-cognition, which is the (tacit) skill to think about thinking, and also includes knowledge about knowledge (such as knowing what aspects of AQAL are difficult to understand).

We will not go into any detail exploring the cognitive and epistemological theories behind (and relationships between) the various terms illustrated in Figure. The purpose of the Figure is to illustrate concepts related to skills and beliefs and note that it is important when using these concepts to be explicit about whether one is referring to tacit or explicit knowledge (or both). If the use of the term is toward the tacit, then what I have said above about skills applies; if the use of the term is closer to the explicit, then apply what I have said about belief. Even though ideas considered knowledge or theories may not seem like "beliefs," if they are explicit we are lumping them with beliefs in our treatment. The higher order second tier skills we discuss are related to meta-knowledge, and what is important in the end is that one develops the (tacit) skills involved, not that one learns about them in an intellectual or scholarly (explicit) way.

Conclusions

Is second tier capacity (or capacity at any stage) more about what one believes or the skills and capacities that one has? I have argued that skills are more important, yet less salient in integral dialogue. I claim that supporting skills is a better end goal for integralists than instilling beliefs, and that building belief is one important means to that goal, but, in very general terms, not the goal itself. I showed how differentiating skill vs. belief aspects of developmental theory can clarify arguments, for example, in explaining how the phenomena of the mean green meme can be attributed to pre-green (pre-conventional or conventional) levels of consciousness or skill

development being attracted to the surface features of post-conventional cultural belief systems.

The article explores the benefits and drawbacks of integrally-informed approaches to promoting skills vs. beliefs outside of the integral community. In addition to supporting skills over beliefs we can aim to use second tier wisdom skills, i.e. be self-reflective and construct-aware, when we disseminate integrally-informed beliefs. This requires having the "negative capability" to tolerate and work within uncertainty, unknowing, and paradox. In what I call the Idea Portability Principle: understanding indeterminacy and dealing with the indeterminacy of ideas is more important the greater the distance between the worldviews or beliefs of interlocutors. We can ask whether the widest and deepest dissemination of integral ideas comes from making those ideas more clear, compelling, and expansive ("positive capability"), or whether it comes from framing those ideas with more wisdom-skill and negative capability. Both are needed, and modeling integral skills within the performative act of communicating integral beliefs requires negative capability in proportion to positive capability. To ignore this principle risks attracting people to those beliefs for the wrong reasons. And it risks making the ideas unpalatable to those most ready to understand and use them.

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² Second tier is a term used within the integral community (see Wilber, 2006) to refer to a level of adult cognitive/emotional/social/spiritual development that is post-formal and post-rational. Associated terms include vision logic (Gebser, see Feuerstein, 1987), meta-systematic (Commons & Richards, 1984), dialectical thinking (Basseches, 2005), 5th Order (Kegan, 1994), and construct-aware (Cook-Greuter, 2000). I assume that the reader is familiar enough with the landscape of integrally informed theories to have some familiarity with the AQAL model and term second tier.

³ "Construct-aware" is a developmental stage in Suzanne Cook-Greuter's Leadership Development framework (2000). Though it is sometimes used as a label for a developmental level that one may be "at," here I am treating it as a set of skills that most adults have to some degree. Construct-aware thinking involves a reflective relationship to one's own thought habits and belief-forming processes. According to Cook-Greuter, at construct-aware one develops a realization of "the absurdity or automatic limits of human map making," and "the paradoxes inherent in rational thought," and starts to "pay attention to the automatic judgment habits...of mind." The Construct-aware level or stage is characterized by a stable manifestation of such habits and self-understandings across many life contexts, but people have such abilities to *some* extent at earlier stages.

⁴ These articles are an extension of a paper presented at the 2010 Integral Theory Conference. In 2011 it was slated to be published in an edited book ("Enacting an Integral Future") but after some delays that book project was recently discontinued. I mention this because, though the issues are still quite relevant, and I have done some tuning up to make it current, some of the examples I draw from are now a bit dated.

⁵ World-views do include much that is assumed, not-reflected upon, and tacit, including our cognitive filters. But within integral discourse the focus on world-views is usually on what people believe and what values they espouse.

⁶ Each new level of development brings challenges and problems. as well as new capacities.

⁷ It is important to try differentiate truth claim vs. ethical/normative claims, yet philosophers have also shown that arguing for truths and arguing for norms are intimately and subtly intertwined (Habermas, 1992, 2003; Cook, 1994).

⁸ For example, Craig Hamilton (2008) puts it this way, in describing the "enlightened humanity" or admirable qualities we see and seek in ourselves and others: "we can acknowledge that there is something...which has to do with the depth of our interiors, our moral sense, our character, our values, our wisdom, our decency, our compassion, our willingness to risk for a greater good."

⁹ Beck & Cohen's (1996) Spiral Dynamics framework supports the same integration, but is based on a particular research lineage, whereas Wilber's contribution is derived from a synthesis of many research lineages

¹⁰ Cohen's framework (belief system) also includes a model of the "Authentic Self" and the "False Self," and "Five Tenets" that define an enlightened or liberated relationship to life (see www.andrewcohen.org/teachings). Cohen and his students and associates are clearly interested in the types of skill development mentioned in this article and by skills-centered developmentalists—my point is that the core of what they are promoting and teaching is about a particular worldview.

¹¹ It should be noted that the magazine *EnlightenNext* put out by Cohen and associates has included articles that focus on second tier skills as well as those that focus on second tier belief systems.

¹² Including recognizing (diagnosing) how the developmental states (v-Memes) manifest in individuals and groups, and understanding how transformational change happens in human systems.

¹³ It also mentions how people at each level orient to self-concept, authority and autonomy, relationships, dialog, truth (epistemology), and work.

¹⁴ And I align with the more fundamental goal to support all people in healthy development up the spiral, including horizontal growth, to the extent that doing so meets real needs.

¹⁵ Not mentioned here are the plethora of developmental scholars who are not thickly referenced in the integral community. Of particular importance to the topic of one's relationship to belief-holding are those studying the related capacities called epistemic cognition or epistemic beliefs (Kitchener et al., 1983; Kuhn & Pease, 2008; Schommer-Aikens & Hutter, 2002), reflective judgment (King & Kitchener, 1994), and meta-cognition (Flavell, 1980; Mayer, 1998; Winne, 2001).

¹⁶ This framework is adapted from Cook-Greuter and Kegan, and parallels the AQAL model's I, We, It, and Its quadrants, respectively. It has similarities with several other models, including Jordan's (2011) model defining context awareness, stakeholder awareness, self-awareness, and task-complexity awareness.

¹⁷ In Murray (2008) I also describe second tier thinking in terms of meta- capacities such as meta-cognition, meta-dialog, meta-learning, meta-affect, meta-leadership, and meta-decision making. In considering such "definitions" we should be clear that "second tier" is an emerging construct—its meaning is being co-constructed within the community of discourse.

¹⁸ Also called sensitive-self, cultural creative, pluralist, or individualist (non-synonymous terms used to reference more or less the same cultural developmental level).

¹⁹ This is understandable because, in a sense, the integral project is largely aimed at audiences ready for a transition into second tier. Clarifying the problems with progressive and cultural creative modes helps articulate the benefits of second tier modes.

²⁰ To nuance this argument using developmental lines: here I assume that the Turquoise skill set includes second tier ethical capacities; as advanced cognitive capacities does not at all guarantee advanced moral or pro-social capacities. Also, as discussed in Murray (2015), in some situations I might trust the group with the least shadow material, regardless of developmental level.

²¹ For example assume a group has both a cognitive capacity (skill level) and belief set at, say, Green. Someone with cognitive skills significantly higher than Green, who can thus objectively see and manipulate Green level ways of thinking, could manipulate and distort the Green belief set toward unethical ends in ways invisible to Green cognition. If coerced into actions, the victim's green level skills would be exploited, but it was a belief system that provided the original mechanism for exploitation.

²² An overdevelopment of the cognitive line, without development of ego, emotional/social, and moral lines, *can* be just as problematic. Also note that the capacity or meta-skill needed to *discern* when and how to use both skills and beliefs is itself a *skill*.

²³ To make the tacit explicit is the developmental subject-to-object move discussed by Kegan (1994), but knowledge also moves in the other direction, from explicit to tacit. The rules and skills of tennis might be studied verbally but as expertise is developed the knowledge becomes automatic and unconscious, and one might even forget the verbal instructions. Research has also shown that analyzing a skill as we perform it can have negative effects on performance (Collins 2010; Kahneman, 2011).