

and of course it is us. The *modern* is struggling to give way to the *post-modern*.

The phase-specific, phase-appropriate modern worldview, having served its purposes, is now living in its own fumes. We are breathing our own exhaust. And how we handle this, how we collectively handle this, will determine whether a new and more adequate worldview emerges to defuse these problems, or whether we are buried in our own wastes.

Spirit has run up against its own limitations at this stage in its unfolding. This extraordinary modern flower blossomed in its glorious spring, and now can do nothing but watch its own leaves fall dead on the ground of a rising tomorrow. And what indeed will bloom in that new field?

5

The Four Corners of the Kosmos

Q: So is it at least fair to say that you believe we are approaching the end limit of the rational-industrial worldview?

KW: Only if we are very careful about how to interpret that. The rise of modernity—and by “modernity” I mean specifically the rational-industrial worldview, and roughly, the Enlightenment in general—served many useful and extraordinary purposes. We might mention: the rise of democracy; the banishing of slavery; the emergence of liberal feminism; the widespread emergence of empirical sciences, including the systems sciences and ecological sciences; an increase in average life span of almost three decades; the introduction of relativity and perspectivism in art and morals and science; the move from ethnocentric to worldcentric morality; and in general the undoing of dominator social hierarchies in numerous significant ways.

Those are rather extraordinary accomplishments, don’t you think? The antimodernist critics who do nothing but condemn modernity, while basking in these many benefits, are being quite unfair, it seems to me.

On the other hand, the giddy promoters of modernity as nothing but a great progress report ignore the recalcitrant problems that modernity has never solved and likely can never solve.

Q: The inherent problems or limitations built into modernity.

KW: Built into the rational-industrial worldview, yes.

Q: So moving “beyond modernity”—going “postmodern”—requires what, exactly?

KW: Well, in simple terms, to transcend and include modernity—or

rational-industrialization—would mean, for the *transcend* part, that we have to (1) be open to modes of consciousness that move beyond mere rationality, and (2) embed them in modes of techno-economic structures that move beyond industrialization. In other words, a change of consciousness embedded in a change of institutions. Either one alone will probably not work.

Q: So, trans-rational and trans-industrial.

KW: Yes, remembering that both rationality and industry will be *included* as well, but now as mere components in a more balanced, more inclusive, more integrated stance that will incorporate—and limit—rationality and industry. What we might call sustainable rationality, sustainable industry.

But in some ways, rationality and industry, left to their own devices, have become cancers in the body politic, runaway growths that are malignant in their effects. They overstep their limits, overrun their functions, and drift into various dominator hierarchies of one sort or another. To transcend modernity is to negate or limit these overpowering facets, while including their benign and beneficial aspects. The coming transformation will transcend and include these features of modernity, incorporating their essentials and limiting their power.

And, of course, this new and wonderful transformation, which everybody seems to be yearning for, will nevertheless bring its own recalcitrant problems and brutal limitations. It will defuse some of the problems of rational-industrialization, which is wonderful, but it will create and unleash its own severe difficulties.

And so, if this is specifically what we mean by a coming transformation—as opposed to some utopian new age—then yes, I believe this transformation is definitely under way.

The Four Quadrants

Q: So part of the coming transformation will involve both a change in consciousness and a change in institutions.

KW: I believe so, yes. It will actually involve a new worldview, set in a new techno-economic base, with a new mode of self-sense, possessing new behavioral patterns.

Q: Okay, that gets us directly into what you call *the four quadrants* (see figure 5-1). But before we talk about these four quadrants, I'm curious, how did you arrive at this concept? I haven't seen it before, and I was wondering how you came up with it.

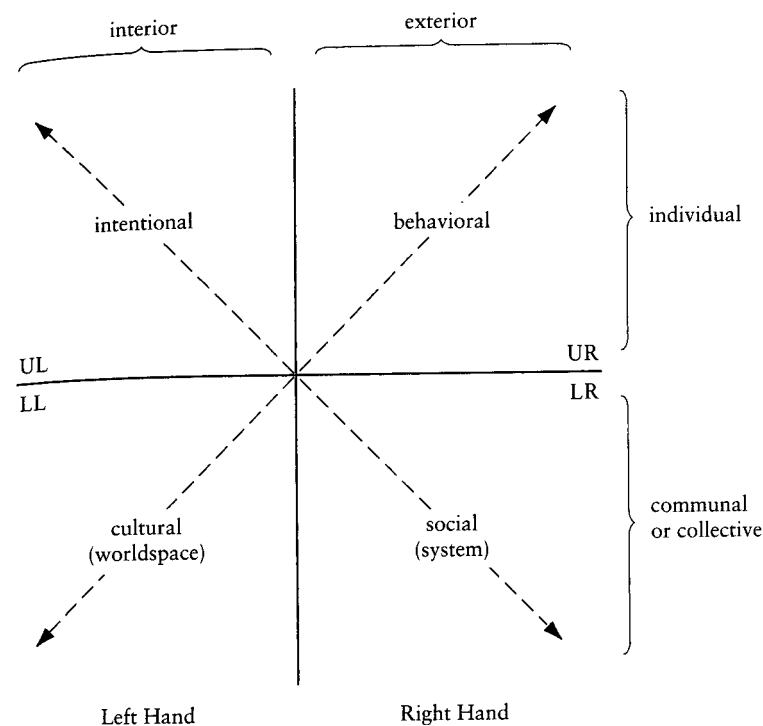


FIGURE 5-1. *The four quadrants.*

KW: You mean the mental steps I went through to arrive at the four quadrants?

Q: Yes.

KW: Well, if you look at the various “new paradigm” theorists—from holists to ecofeminists to deep ecologists to systems thinkers—you find that all of them are offering various types of holarchies, of hierarchies. Even the anti-hierarchy ecophilosophers offer their own hierarchy, which is usually something like: atoms are parts of molecules, which are parts of cells, which are parts of individual organisms, which are parts of families, which are parts of cultures, which are parts of the total biosphere. That is their defining hierarchy, their defining holarchy, and except for some confusion about what “biosphere” means, that is a fairly accurate holarchy.

And likewise, orthodox researchers offer their own hierarchies. We find hierarchies in moral development, in ego development, in cognitive development, in self needs, in defense mechanisms, and so on. And these,

too, seem to be largely accurate. We also find developmental holarchies in everything from Marxism to structuralism to linguistics to computer programming—it's simply endless.

In other words, whether it's realized or not, most of the maps of the world that have been offered are in fact holarchical, for the simple reason that holarchies are impossible to avoid (because holons are impossible to avoid). We have literally hundreds and hundreds of these holarchical maps from around the world—East and West, North and South, ancient and modern—and many of these maps included the map-maker as well.

So at one point I simply started making lists all of these holarchical maps—conventional and new age, Eastern and Western, premodern and modern and postmodern—everything from systems theory to the Great Chain of Being, from the Buddhist vijñanas to Piaget, Marx, Kohlberg, the Vedantic koshas, Loevinger, Maslow, Lenski, Kabbalah, and so on. I had literally hundreds of these things, these maps, spread out on legal pads all over the floor.

At first I thought these maps were all referring to the same territory, so to speak. I thought they were all different versions of an essentially similar holarchy. There were just too many similarities and overlaps in all of them. So by comparing and contrasting them all, I thought I might be able to find the single and basic holarchy that they were all trying to represent in their own ways.

The more I tried this, the more it became obvious that it wouldn't work. These various holarchies had some undeniable similarities, but they differed in certain profound ways, and the exact nature of these differences was not obvious at all. And most confusing of all, in some of these holarchical maps, the holons got *bigger* as development progressed, and in others, they became *smaller* (I didn't yet understand that evolution produces greater depth, less span). It was a real mess, and at several points I decided to just chuck it, forget it, because nothing was coming of this research.

But the more I looked at these various holarchies, the more it dawned on me that there were actually *four very different types* of holarchies, four very different types of holistic sequences. As you say, I don't think this had been spotted before—perhaps because it was so simple; at any event it was news to me. But once I put all of these holarchies into these four groups—and they instantly fell into place at that point—then it was very obvious that each holarchy in each group was indeed dealing with

the same territory, but overall we had four different territories, so to speak.

Q: These four territories, these four different types of holistic sequences, you call the four quadrants.

KW: Yes, you can see these in figure 5-1. In figure 5-2, I've added some examples. I must emphasize that this figure only gives a very few examples from each quadrant, but you can get the general idea.

So the question then became, how did these four types of holarchies relate to each other? They couldn't just be radically different holistic sequences. They had to touch each other somehow.

Eventually it dawned on me that these four quadrants have a very simple foundation. These four types of holarchies are actually dealing

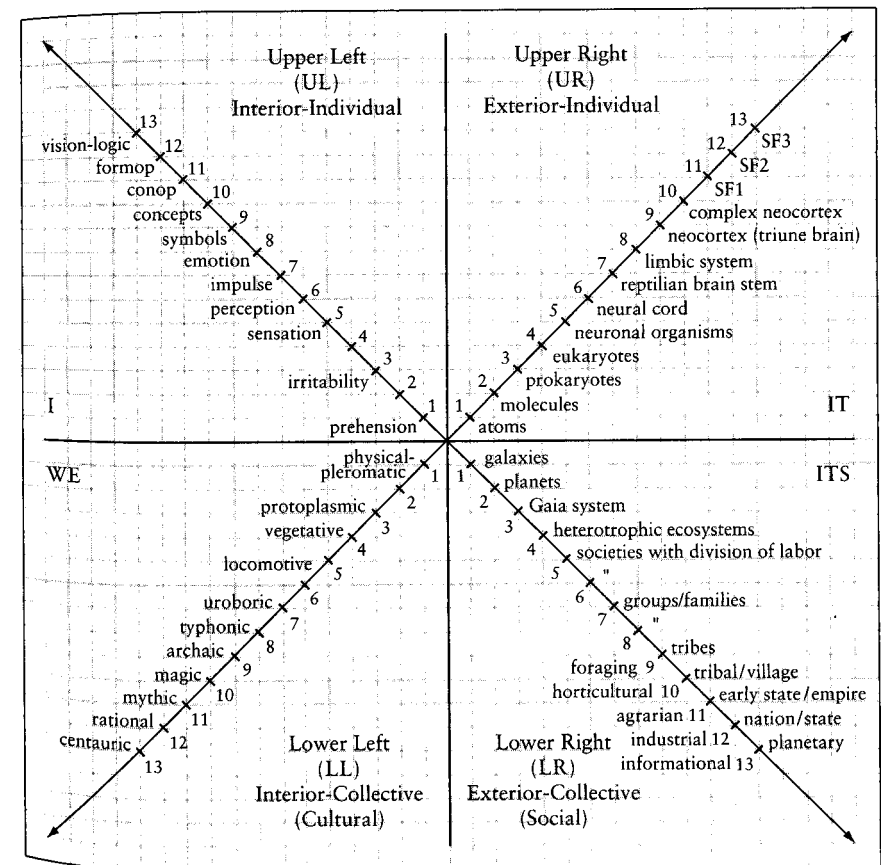


FIGURE 5-2. Some details of the four quadrants.

with the *inside* and the *outside* of a holon, in both its *individual* and *collective* forms—and that gives us four quadrants.

Inside and outside, singular and plural—some of the simplest distinctions we can make, and these very simple features, which are present in all holons, generate these four quadrants, or so I maintain. All four of these holarchies are dealing with real aspects of real holons—which is why these four types of holarchies keep insistently showing up on the various maps around the world.

It appears that these are some very bedrock realities, these four corners of the Kosmos.

Intentional and Behavioral

Q: Perhaps a few examples.

KW: Okay. The four quadrants are the *interior* and *exterior* of the *individual* and the *collective*, which you can see in figures 5-1 and 5-2.

We can start with the individual holon, in both its interior and exterior aspects. In other words, with the Upper-Left quadrant and the Upper-Right quadrant. Figure 5-3 is a little more detailed map of these two quadrants.

If you look at the Upper-Right column first, you can see the typical holarchy presented in any standard biology textbook. Each level transcends and includes its predecessor. Each level includes the basics of the previous level and then adds its own distinctive and defining characteristics, its own emergents. Each of these follows the twenty tenets, and so on.

prehension	atoms
irritability	cells (genetic)
rudimentary sensation	metabolic organisms (e.g., plants)
sensation	protoneuronal organisms (e.g., coelenterata)
perception	neuronal organisms (e.g., annelids)
perception/impulse	neural cord (fish/amphibians)
impulse/emotion	brain stem (reptiles)
emotion/image	limbic system (paleomammals)
symbols	neocortex (primates)
concepts	complex neocortex (humans)
UPPER LEFT	UPPER RIGHT

FIGURE 5-3. *The interior and the exterior of the individual.*

But notice that these are all *exterior* descriptions—it's what these holons look like from the outside, in an objective and empirical manner. Thus, in a scientific text, you will find the limbic system, for example, described in detail—its components, its biochemistry, when and how it evolved, how it relates to other parts of the organism, and so on. And you will probably find it mentioned that the limbic system is the home of certain very fundamental *emotions*, certain basic types of sex and aggression and fear and desire, whether that limbic system appears in horses or humans or apes.

But of those emotions, of course, you will not find much description, because emotions pertain to the *interior experience* of the limbic system. These emotions and the awareness that goes with them are what the holon with a limbic system *experiences from within*, on the *inside*, in its *interior*. And *objective* scientific descriptions are not much interested in that interior consciousness, because that interior space cannot be accessed in an objective, empirical fashion. You can only *feel* these feelings from within. When you experience a sort of primal joy, for example, even if you are a brain physiologist, you do not say to yourself, Wow, what a limbic day. Rather, you describe these feelings in intimate, personal, emotional terms, *subjective* terms: I feel wonderful, it's great to be alive, or whatnot.

So in the Upper-Left column, you can see a list of some of the basic types of *subjective* or *interior awareness* that go with these various *objective* or *exterior forms* listed in the Upper-Right column. "Irritability"—the capacity to actively respond to environmental stimuli—begins with cells. Sensations emerge with neuronal organisms, and perceptions emerge with a neural cord. Impulses emerge with a brain stem, and basic emotions with a limbic system. And so on.

This is also a holarchy, but a subjective or interior holarchy. Each level also transcends and includes its predecessor, each follows the twenty tenets, and so on. And this Left-Hand holarchy, like the Right-Hand, is based on extensive evidence already available, which we can discuss if you want.

But the main point is that this Left-Hand dimension refers to the inside, to the *interior depth* that is *consciousness* itself.

Q: You said earlier that depth is consciousness, or what depth looked like from within.

KW: Yes, exactly. The Left Hand is what the holon looks like from within; the Right Hand is what the same holon looks like from without. Interior and exterior. Consciousness and form. Subjective and objective.

Q: The Upper-Right quadrant is the one we are most familiar with, simply because it is part of the standard, objective, empirical, scientific map.

KW: Yes, and we can assume it's accurate enough, as far as it goes. It gives the typical holarchy for individual holons described in objective terms: atoms to molecules to cells (early cells, or prokaryotes, and advanced cells, or eukaryotes) to simple organisms (first with a neuronal net and then with a more advanced neural cord). Then to more complex organisms, reptiles to paleomammals to humans, the latter possessing a complex triune brain, which transcends and includes its predecessors, so that the triune brain has a *reptilian* stem and a *paleomammalian* limbic system, plus something new, a complex *neocortex* capable of abstract logic and linguistics and vision-logic (in figure 5-2, I have listed these more complex capacities as SF₁, SF₂, SF₃, which we'll discuss later).

We don't have to agree with the exact placement of everything in figure 5-3, but most people would agree that *something* like that is occurring.

Cultural and Social

Q: So that is the upper half of the diagram, the individual. There is now the lower half, the collective.

KW: Yes. Individual holons exist only in *communities* of similar-depth holons. So we need to go through both of the columns in figure 5-3 and find the types of *communal* holons that are always associated with the *individual* holons.

Q: And this communal aspect also has an interior and an exterior, which are Lower Left and Lower Right.

KW: Yes.

Q: You call these "cultural" and "social."

KW: Yes, "cultural" refers to all of the *interior* meanings and values and identities that we share with those of similar communities, whether it is a tribal community or a national community or a world community. And "social" refers to all of the exterior, material, institutional *forms* of the community, from its techno-economic base to its architectural styles to its written codes to its population size, to name a few.

So in a very general sense, "cultural" refers to the shared collective *worldview* and "social" refers to the *material base* of that worldview. (Of course, right now I'm just talking about how these appear in human holons; we'll discuss nonhuman in a moment.) Social means any objec-

tive, concrete, material components, and especially the techno-economic base, so you see these listed as foraging, horticultural, agrarian, industrial; and the geopolitical structures of villages, states, world federation, and so on. These are all examples of the exterior forms of the collective, as you can see in figure 5-2.

Q: I think that's straightforward enough. But let's look at nonhuman holons. We usually don't think of them as having a common worldview or common worldspace—a common culture.

KW: If consciousness is depth, and depth goes all the way down, then shared depth or common depth also goes all the way down—culture goes all the way down.

Q: I'm sorry?

KW: In other words, if holons share outsides, they share insides.

Q: Their "culture," as it were.

KW: Yes. By the culture or worldspace of holons, I simply mean a shared space of what they *can* respond to: quarks do not respond to all stimuli in the environment, because they *register* a very narrow range of what will have meaning to them, what will *affect* them. Quarks (and all holons) respond only to that which *fits their worldspace*: everything else is a foreign language, and they are outsiders. The study of what holons *can* respond to is the study of shared worldspaces. It's the common world that all holons of a similar depth will respond to. That is their shared culture.

Q: Okay, perhaps an example.

KW: Nonhuman cultures can be very sophisticated. Wolves, for example, share an emotional worldspace. They possess a limbic system, the interior correlate of which is certain basic emotions. And thus a wolf orients itself and its fellow wolves to the world through the use of these basic emotional cognitions—not just reptilian and sensorimotor, but affective. They can hunt and coordinate in packs through a very sophisticated emotional signal system. They share this emotional worldspace.

Yet anything *outside* that worldspace is *not registered*. I mean, you can read *Hamlet* to them, but no luck. What you are, with that book, is basically dinner plus a few things that will have to be spat out.

The point is that a holon responds, and *can respond*, only to those stimuli that fall within its worldspace, its worldview. Everything else is nonexistent.

Q: Same with humans.

KW: Same with humans. By the time evolution reaches the neocortex, or the complex triune brain, with its interior correlates of images

and symbols and concepts, these basic worldspaces have become articulated into rather sophisticated cognitive structures. These worldspaces *incorporate* the basic components of the previous worldspaces—such as cellular irritability and reptilian instincts and paleomammalian emotions—but then *add* new components that articulate or unfold new worldviews.

As we were saying earlier, the Kosmos looks different at each of these stages because the Kosmos *is* different at each of these stages. At each of these stages, the Kosmos looks at itself with new eyes, and thus brings forth new worlds not previously existing.

These cultural worldspaces are listed on the Lower Left. And you can see that they evolve from physical and vegetative and reptilian (“uroboric”—of the serpent) and limbic-emotional (“typhonic”), into more specifically hominid and then human forms: archaic, magic, mythic, rational, centauric (or existential), with possibly higher stages yet to come.

These worldviews are correlated with the *exterior* forms of the *social structures* that support each of those worldviews. For example, from the prokaryotic Gaia system to societies with a division of labor (in neural organisms) to groups/families of paleomammals to the more human forms of: *foraging* tribes to *horticultural* villages to *agrarian* empires to *industrial* states to *informational* global federation. Which is the list to date, as reconstructed from available evidence. These are all listed on the Lower Right.

Q: And these four quadrants are related to each other in exactly what fashion?

KW: I have some specific thoughts on this, but right now I don’t want to push my own theory in this particular regard. I will settle for the orienting generalization that we cannot reduce these quadrants to each other without profound distortions. As usual, reductionism seems to be a bad idea. Let’s just say they interrelate, or they interact, or they each have correlates in the others. When we talk about the different truths in each quadrant, I think you’ll see what I mean.

An Example

Q: Why don’t you take an example of a single thought, a single thought holon, and show how it has *correlates in all four quadrants*. I wonder if we could go through that example briefly.

KW: Okay. Let’s say I have a thought of going to the grocery store. When I have that thought, what I actually experience is the thought

itself, the interior thought and its meaning—the symbols, the images, the idea of going to the grocery store. That’s Upper Left.

While I am having this thought, there are, of course, correlative changes occurring in my brain—dopamine increases, acetylcholine jumps the synapses, beta brainwaves increase, or whatnot. Those are observable behaviors in my brain. They can be empirically observed, scientifically registered. And that is Upper Right.

Now the internal thought itself only makes sense in terms of my cultural background. If I spoke a different language, the thought would be composed of different symbols and have different meanings. If I existed in a primal tribal society a million years ago, I would never even have the thought “going to the grocery store.” It might be, “Time to kill the bear.” The point is that my thoughts themselves arise in a *cultural background* that gives texture and meaning and context to my individual thoughts, and indeed, I would not even be able to “talk to myself” if I did not exist in a community of individuals who also talk to me.

So the cultural community serves as an *intrinsic background* to any individual thoughts I might have. My thoughts do not just pop into my head out of nowhere; they pop into my head out of a cultural background, and however much I might move beyond this background, I can never simply escape it altogether, and I could never have developed thoughts in the first place without it. The occasional cases of a “wolf boy”—humans raised in the wild—show that the human brain, left without culture, does not produce linguistic thoughts on its own. The self is far from the autonomous and self-generating monad the Enlightenment imagined.

In short, my individual thoughts only exist against a vast background of cultural practices and languages and meanings, without which I could form virtually no individual thoughts at all. And this vast background is my culture, my cultural worldview, my worldspace, which is the Lower Left.

But my culture itself is not simply disembodied, hanging in idealistic midair. It has *material components*, much as my own individual thoughts have material brain components. All *cultural* events have *social* correlates. These concrete social components include types of technology, forces of production (horticultural, agrarian, industrial, etc.), concrete institutions, written codes and patterns, geopolitical locations (towns, villages, states, etc.), and so on. And these material, social, empirically observable components—the actual *social system*—are crucial in helping to determine the types of cultural worldview.

So my supposedly “individual thought” actually has at least these four facets, these four aspects—intentional, behavioral, cultural, and social. And around the circle we go: the social system will have a strong influence on the cultural worldview, which will set limits to the individual thoughts that I can have, which will register in the brain physiology. And you can go around that circle in any direction you want. The quadrants are all interwoven. They are all mutually determining. They all cause, and are caused by, the other quadrants.

Q: Because all individual holons have these four facets.

KW: Yes, every holon has these four aspects, these four quadrants. It is not that an individual holon exists in one or another of these quadrants. It is that every individual holon has these four quadrants, these four aspects to its being. It's like a diamond with four facets, or four faces.

Of course, these four facets become very complicated and intermixed, but there are at least these four. These four seem to be the *minimum* that we need to understand any holon. And this especially holds for higher transformation, for higher states of consciousness, as I guess we'll see.

The Shape of Things to Come

Q: We started this discussion by talking about transformation in general, and any possible coming transformation in particular.

KW: This transformation is already proceeding, and if we want to consciously find these evolutionary currents operating in our own being as well—if we want to consciously join Spirit-in-action—then the four quadrants can help us orient ourselves more effectively, can help us become more conscious of the evolutionary currents already flowing around us and through us and in us.

We could say that Spirit manifests as all four quadrants. Spirit isn't just a higher Self, or just Gaia, or just awareness, or just the web of life, or just the sum total of all objective phenomena, or just transcendental consciousness. Rather, Spirit exists in and as all four quadrants, the four compass points, as it were, of the known Kosmos, all of which are needed to accurately navigate.

So what we will want to talk about, I suppose, is how this coming transformation—and the higher spiritual stages—will appear and manifest in all four quadrants. What is a higher Self? What is higher brain functioning? What is the transformation of the body as well as of the mind? What is a higher or deeper culture? How is it embedded in wider

social systems? What is more highly developed consciousness? How is it anchored in new social institutions? Where is the sublime?

What would all of this look like? How can we help it along in all of these quadrants, and not just focus on Self, or just Gaia, or just the World Federation? For it appears that all of these will emerge together, or they will emerge not at all.

Q: It's a package deal.

KW: It seems to be a package deal, yes. Higher or deeper stages of consciousness development disclose deeper and wider patterns in self, in individual behavior, in culture, and in society—intentional, behavioral, cultural, and social—all four quadrants.

If we don't take all of those into account, then I think they might start the transformation without us. The transformation will occur, is occurring, but we'll be sitting in our favorite quadrant, explaining to people why we have the new paradigm, and transformation will sail on without us. We will abort our own full-quadrant participation in forces that are already in play. We will go limping into the future, all puzzles and grins, and these wider currents will not be activated in our own being. We'll be driftwood on the shore of this extraordinary stream. We will mistake our crutches for liberation, we will offer our wounds to the world, we will bleed into the future all smiles and glory.

I don't think that partial approach will ever work. It seems instead that we need an *integral* approach that will include all four quadrants, all four faces of Spirit. Perhaps the secret to higher transformation involves this more balanced, complete, and integral approach. What do you think?