

A Conversation between Ken Wilber and Michael Zimmerman:
Bringing Semantic Clarity to
Part/Member, Internal/Inside/Interior and Size/Span/Embrace.

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KW: So when you re-read your paper did you like it?

MZ: Yeah, I thought it was good.

KW: Me too. I thought it was great.

MZ: Great. So did I get it right?

KW: I think so. We might as well just jump into it. I have to say that I found Rowe to be a really unsophisticated thinker, but I'm very grateful for his critique because I think your response is fantastic.

MZ: Well, he says what a lot of people say.

KW: Exactly. But a lot of people are equally unsophisticated.

At any rate we can go through it. One of the strange things about this is that the actual concepts, when you really get down to it, are fairly simple, but there are two problems. There are a lot of fairly simple concepts and the semantics involved are a nightmare. Particularly when we talk about matter, physiosphere, biosphere, ecosphere, body, nature—all of those have 22 different definitions at a minimum, and that's part of the great problem with all of this.

But I think your paper is brilliant at points. The wording is fantastic and some of the sentences in here are just beautiful. They really summarize and grab the essence of a position, whether it's perspectivism or healthy postmodernism. I thought it was just a joy to read, so I'm very grateful to Rowe.

MZ: That sounds good. I'm happy.

Well, let me ask you a question. I've been in touch with some of the leading players in ecosystem thermo-dynamics—Sean and I have been communicating about this. And here's what they argue, and I know you're somewhat familiar with this, but these are people like Sam Salta, Robert Donawich, and Shnieder and Kay, and a bunch of other people like this. Their argument is something like this: The reason that there are life forms at all, and any structure in the universe at all, is because when energy passes into something relatively at equilibrium and provokes it out of equilibrium, then it wants to

get back to equilibrium as fast as possible. One way this happens is for the heated up and energized thing to form spontaneous structures which dissipate the energy rapidly with the intent of getting back to equilibrium, but since that energy keeps coming in, that structure stays there, it stays in a system, in effect.

KW: This sounds like a married man to me. (Laughter.) Trying to get rid of irritation and return to normalcy. I understand. Go ahead.

MZ: You have then the continuation as well, I mean what happens at a certain point is that life emerges, and life becomes more and more complicated, and more efficient, and more effective at processing all of this energy, and ecosystems arise along with life and are effective ways of getting rid of all this energy. They have tested various kinds of land surfaces—one all asphalt, one a mature grass land, one disrupted grass land—and they find for example that the heat given off by the disrupted grass land is greater than the heat given off by the mature grass land, showing that the mature grassland is doing a better job at dissipating energy down to very little. Now they're not losing any, but the disrupted grassland is not effective yet, not efficient at capturing the energy and processing it and making it increasingly available to lower levels.

Now what these guys go on to say, even Salta, who's a very well know theorist in hierarchy theory, is that the final cause of life in the universe is the second law of thermodynamics, and that what life's trying to get at is equilibrium. We live in a universe that is way out of equilibrium because of the Big Bang, and the structures of the universe basically don't want to be here. They're here because they were provoked by energy, and the structure we see is basically a universe that has been blasted out of equilibrium, trying desperately to get back to equilibrium, in effect.

Now, I wrote to Salta and said, "Look, I think what you're saying is terrific in many ways,"—he claims to be influenced by Shelling and German idealism and all of this, but I said "What am I going to tell the environmentalists about this, because this means basically that human beings are really the most fantastic energy squanderers?" We're doing a great job at using up all of the oil reserves, and tearing everything down and making it more simple. I mean are we just following nature's laws? You could say that this is an issue of survival here, but even attempts to curb our behavior, according to environmental principals, are clearly kind of pointless, because if human beings are just functions of the Second Law, we're just going to keep doing this ever more effectively. So I asked him "There's a Thanatos in your system, where's the Eros?" And I suppose the Eros would be the spontaneous move to generate order, but you have a more, well, I would...

KW: Let me briefly respond to that, and then I want to go back to your essay.

So, briefly, if you stand back...first of all he's giving a third-person perspective of a system of "its" and what these "its" appear to be doing, yes? And he ascribes hidden intentionalities to those "its," and that's what always happens, even with people who are dealing with thermodynamics. It's one thing to say "This is what we observe in the

universe,” and it’s another thing to say “The universe is attempting to do this.” He’s clearly a thermodynamics guy at heart—he’s a third-person plural perspective guy at heart—and so he sees the universe trying to get back to a state of lower equilibrium, a state of quiescence, and incidentally, there is that kind of force—we call it Thanatos though, which is a descending down the scale movement, and there is that force in the universe. He sees the universe attempting to do that, number one, which is a blind, stupid, return to a lowest level of chaos, but it does so in a way that fails because it keeps escaping into higher order. So he sees two stupidities driving the universe to higher beauty. (Laughter.) And it’s like “Okay, if that’s your myth, go right ahead, buddy. Good luck.”

We can come back to that.

MZ: That’s fine for now.

KW: So let me just run through your paper. First of all, there’s two or three or four fun things we can discuss, but as far as the paper per se, there’s only one small area that I think needs a little adjustment, and it’s not so much that it’s wrong, by any means, it’s that it’s a much more complex topic, and we can discuss it. It has to do with the relation between size, span, and embrace. They’re actually three different things.

I think these first few pages are great. I think the summary is great. I think the level of abstraction is great. I love the overall view. It’s particularly the case, and my own view is that past habits up to the average become predictive for future forms in that same class, but again you can explain that, as you very well point out, without having recourse to Platonic fixed givens or anything like that at all.

So again, Rowe is just a superficial reading of this popularized book, and that’s okay. It’s more important that you get a chance to respond to it.

I was glad to see you also working in the notion of industrial ontology, because first of all, I think it’s very true, and it’s got to be a real poke in the eye for most eco-philosophers to realize that they are embracing an industrial ontology—nature as a third-person system of process “its.” That is exactly the industrial ontology. It’s a differentiated nature. It’s one of the Big Three gone absolutist. And that’s different from the magic view of nature. The eco-system web-of-life view of nature is a third-person system of interwoven process “its,” is different than the magic view of nature as first-person egoic spirit. So that’s where systems theorists hook up with tribal eco-primitivism, and they think their talking about the same nature and it’s not even close. Even Joe Campbell was very explicit that all the magical worldviews have one thing in common that he called “ego-centrism.” Very much on the money. Again, it’s that there is a partial truth in all of these approaches, including Rowe’s, but we can’t get at the partial truth by having a hidden industrial ontology—which many of them do—and a hidden flatland subtle reductionism, which many, or I would say even most of them do. So we’re paradoxically, or ironically, trying to honor their truths but without getting stuck in exactly the things they would criticize if they could see them more clearly.

Moving on to the paragraph that starts “The second kind of transcendence which Wilber...” and then “He claims that it descends...simply the form of interior development in the evolution of consciousness...” And what I would say, even though that’s a correct quote, is that the second form of transcendence for me is really just development in general. I most often use things like “molecules transcend and include atoms.” And so it’s not even just interior, or just consciousness, it’s development...

MZ: Right, because that would be only one quadrant.

KW: Development occurs in all four quadrants, so there’s a transcendence in all the quadrants. Remember that the four quadrants are just four perspectives on a single occasion. And we’ll get to that in a moment.

At any rate, development in general has a transcend and include aspect, and each occasion has an individual, social, interior, and exterior dimension to it. And each of those envelop their predecessor and then transcend it by adding some degree of novelty, although it’s very different in the different dimensions. But the transcendent part is not only not, in its healthy form, an escape or repression, it’s Agape. It’s an increasing embrace of wholeness. So transcendence is a form of increasing love. I move beyond myself to encompass, to love, something else. That’s the real nature of transcendence, it’s increasing embrace.

MZ: Not leaving behind, but including.

KW: Absolutely.

MZ: Not dissociation.

KW: Or repression. And it is individual. Some commentators argue that each social holon should have four dimensions corresponding to how a holon shows up when examined from the four major perspectives. Here’s my view, however: Anything can be looked at *from* the four perspectives, but only an individual sentient holon *possesses* those four perspectives. So, I can look at a tin can from the inside and the outside in the singular and the plural, but the tin can doesn’t have prehension and it doesn’t have consciousness, and neither does a social holon. So we should avoid conflating these things. There’s a difference between saying “Something *has* four perspectives on the world,” and “Something can be *looked at* from four perspectives.”

So, anything can be looked at from the four perspectives which each sentient being has, but only sentient beings have the four perspectives. And by sentient beings we mean an individual sentient holon. We can come back to that. One of the maybe two or three major topics is indeed the relation of individual to social.

Let me just mention a little bit about...I’m under the sub-heading that starts “Rowe’s Major Critique: Wilber’s Illogical Holarchy.” And at the beginning, let me just point out

that from Arthur Koestler, I really only took the term “holon” and “holoarchy.” I don’t necessarily agree with Koestler’s view on nested hierarchy. He used one particular kind of hierarchy. You point this out later in the paper, but I think that you can also just say it upfront. I point out that there are at least four different meanings of whole and part, and you can construct a holoarchy out of each of those if you want. And then I give examples of all four, and I tell why I think that the only one that has a constitutive partness is the individual holon, such as atoms to molecules to cells to organisms. And as you know, then you can actually refer to a subholon as being an element of a compound, or an actual component, an actual constitutive part of the holon above it. Koestler tended to talk as if that was the only kind of relationship, but I don’t quote him on that. I’ve never quoted him on it. I’ve never said that I agree with his three aspects of holons. Rowe has simply picked up on the fact that I use the term “holon” and therefore assumed that everything Koestler said is what I’m saying. This is typical of Rowe’s very superficial approach to things. But it’s important to notice that I’ve never quoted anything more. I do mention at one point that Koestler talks about holons as being Janus faced, and that’s true of an individual holon—that it’s whole at one level and part of the whole of the next—and I think your response is great.

Let me just mention one other item. This is a general thing that your talking about in the essay, and I’m looking at a paragraph that starts out, “Nothing concerning such complex issues is automatic. Habermas however...”

Now, I agree with the topic of this paragraph completely, but just let me point out how difficult this issue is. The third sentence in this paragraph begins, “In the domains such as community, cultural cohesiveness, and individual meaningfulness however, Western social systems may compare unfavorably with some premodern systems.” By those three criteria, it compares unfavorably with Nazis, fundamentalist Christian believers, and Mormons. So this is what I find often...

MZ: Right. There are perverted forms in every one of those.

KW: Well that’s the thing. We tend to think that just because we can say, “Oh it’s meaningful existence, or a cohesive existence,” that somehow that, in itself, is a good.

MZ: It can be, but not necessarily. It’s all a matter of the situation.

KW: And the claim is that the potential for meaningfulness in modernity is greater than the potential for meaningfulness in premodernity, because I can find a social solidarity with all of humanity from a worldcentric stance—something that no premodern culture, per se, or no pre-postconventional structure has. It’s not to say that certain individuals can’t. So the fact that modernity didn’t live up to it’s potential for a worldcentric solidarity doesn’t mean that it can’t, or that the structure itself is intrinsically lacking. That’s a common mis-argument against modernity.

MZ: Yes. The whole point of Hegel's thought, in a way, is to show how the individual is the concrete universal somehow embodying this worldcentric mode of being in the form of a human being.

KW: At its healthiest. And we would add that the fact that modernity had a potential for meaningful worldcentric love, compassion, and solidarity, didn't mean that it necessarily lived up to it in many ways, and that's the dissociation and fragmentation and so on. But so many critics of modernity take the unhealthy fragmented modernity and call that the intrinsic structure of modernity, and that's just simply wrong.

Now, here's where it gets interesting, and we can talk about this from several different points of view. And that is the general meaning of inside and outside and the noosphere being internal. I can locate the section of this section of the essay because you have a little diagram that's labeled "Interior Correlates and Exterior Correlates."

MZ: Yes. I got some of this stuff from Sean, and have appreciated his input on it.

KW: It has noosphere-mind, biosphere-perception, physiosphere-prehension. And then noosphere-neocortex, biosphere-life, physiosphere-matter.

Now those are three good terms, and we're going to use them, so what I would ask you to do in the margins is draw the standard cross-hairs, the four quadrants, and then draw three concentric circles over all four quadrants, which will represent physiosphere, biosphere, and noosphere, and I'm going to label them A, B, and C.

So here's where we run up against the colossal semantic nightmare of what body and nature mean. And as you know, in the past I have made distinctions between nature with a small "n," and Nature with a big "N," and NATURE all capitalized, and nature with a small "n" means nature as set apart from culture, or nature versus history, which is similar to body with a small "b" and mind with a small "m." So nature is to history as body is to mind, or nature is to culture as body is to mind. That's commonly how those are used. But then the ecophilosophers generally get into a little bit of trouble because they often use Nature with a capital "N," which means the sum total of all the sensorimotor things we can see including the human organism. So the human organism is part of Nature, capital "N," and there upon the problems start.

I did a play on this in one chapter in Integral Psychology about looking at this in terms of what is enveloping what. In the UL quadrant the mind transcends but includes the body, so the body is in the mind. But in the UR quadrant "body" means the whole organism so the brain is in the body, but the body is in the mind. It's a colossal semantic nightmare and most people get caught up in this because they don't use consistently defined terms on these very crucial items.

MZ: What chapter of Integral Psychology is that in? Do you remember?

KW: Yes. It's called the 1-2-3 of Consciousness and it assesses the mind-body problem. And like I said, Body with a capital "B" often, for scientists, means my body: "I have a body. My brain is in my body. "Body" means organism." So in the UR quadrant, my stomach is in my body, my tongue is in my body, my brain is in my body etc. Brain is in the body, body contains the brain, so ecophilosophers practicing reductionism say "There's no dualism. They're all body. They're all organism. It's all part of Nature. So the brain is in the body." But in the UL, soul transcends and includes mind, mind transcends and includes body, so the mind actually transcends and includes the body—the body is in the mind. But, the brain is in the body. Do you see what I mean? It's a mess.

MZ: Yes. It is tough. That's what I was trying to work out in this account.

KW: Well, let me point out how we can get even a little more specific. I think using the terms the way you have, this section is fine, but I thought we could discuss it in a little more technical detail because from the time that I wrote Brief History I've actually clarified the various types of "insides" that there are. So we talk about there being three types of "inside" using "inside" loosely. One is, of course, interior versus exterior, one is internal versus external, and one is inside versus outside. And those together are involved in the 8 primordial perspectives of all sentient beings, where sentient being means all individual holons right down to atoms and quarks. And what we're talking about here—if we go back to that little diagram I asked us to draw with the little bullseye, where A is physiosphere or matter, and B is biosphere or life, and C is noosphere or mind—in the UR that means the neocortex or the triune brain. In the UL it's the mind, per se. Then in an individual holon, B in the UR quadrant, for example, is internal to C, and that means it's a component. So that's like atoms to molecules to cells to organisms. A molecule is actually internal to a cell. It means it's an actual component of the cell.

MZ: Right. And you can say of the human biological organism, that it is included in the biosphere.

KW: Well, what we would say there, as you point out, we would be careful to call it a part. We would say that it's a member.

MZ: Well, but the compound individual is a member, right? because that includes the noosphere. But if you take away the noosphere...although you can't do that with any animal organism because it's always an ingredient in an animal organism. But if you could...well, that's the tricky part. In some sense, the human organism is a part of the biosphere, right?

KW: Well, here's how we word this, and this is between us. I'm not saying this goes into the paper. I just want to make sure that we know what we're talking about. Any individual holon can only be internal to another individual holon. No individual holon is ever internal to a society. It can be inside a society, and it's a member, but it's never internal, never a constituent part of the society. That's why if you use the word "part," and say "the organism is part of an ecosystem," that's playing fast and loose with the

word “part.” You have to distinguish what that means. So, we don’t even use the word “part,” because the only kind of partness that an individual holon has in relation to a social holon is that it’s a partner or a member.

MZ: But what about that quote I have from you, from SES?

KW: But I’m using part in any number of two or three different meanings. And now I’m saying, “Between us, let’s get straight about what we’re saying.”

Now, it turns out that if read those quotes, they’re accurate quotes, because “part” can mean the way it’s used. The reason that those quotes have such a punch in SES and Brief History is that they’re pointing out a very important meaning of the word “part” that most ecophilosophers are overlooking. And that’s why it catches them up. This is why we use the rule, for example, that if we take something lower on the hierarchy and destroy it, it destroys everything above it, but not vice-versa. That establishes wholeness and partness in an individual holarchy. That’s where you can say, for example, in the UL quadrant, any element that is at B is a constituent part of an element in C. So the biosphere is part of the noosphere in that sense. But in the lower quadrants, any organism at complexity level B is a member of a social system at complexity level B. And so some people would say that the organism is a part of the ecosystem, using “part” in a loose sense. And that’s okay, but what we say is that you can’t make that partness the same as the individual holon partness.

MZ: Right. Because the kind of coupling involved there is in no way analogous to how an organism is related to the ecosystem.

KW: Correct.

MZ: That’s the mistake that Rowe makes.

KW: Yes. Well most of them make it to one side or the other. So what we’re trying to do is tease that apart. We say that individual holons at level B are constituent parts of C. So in that sense the physiosphere is a part of the biosphere; the biosphere is a part of the noosphere. In any compound individual that’s the case. But elements at level A complexity, are members of ecosystems or social systems at level A complexity. They’re not constitutive parts. They’re members, they’re partners.

MZ: Right. Well that’s what I was trying to say with the idea that the biosphere arises with the organism. They’re co-evolving and one is not reducible to the other. There’s the population dynamicists versus the ecosystems ecologist. Each of them tries to emphasize that one of them is really the ground of the other, but they’re really the ground of each other.

KW: Exactly.

MZ: You know, yours is the only theory that puts the biosphere down at the bottom. Maybe Jantsch does.

KW: No, he only works, strangely, with the right-hand quadrants, but he's right on the money in those. He was a wonderful aid in working some of this out because he was so meticulously careful in looking at those. We'll come back to his work in a moment when we talk about spatial extension.

MZ: Let me ask a question. If you're at the same level B in the bulls eye diagram, would it be false to say that an individual holon is a part of the biosphere? In other words, an individual organism is not part of the biosphere, right?

KW: Right. You have to be really careful by what you mean by "part." If you mean "partner" or "member," yes. This goes back to Nikolas Lumens incredibly important point about "internal." Remember the way we would define internal is the way philosophers would define it, which is that it means a constituent part that is internal to the makeup of something else. And in that sense an atom is internal to a molecule, a molecule is internal to a cell. What we are claiming, and what Lumens is claiming, is that no individual organism is part of a social system, or an ecosystem, in the same way. In other words, what is internal to a social system, and this is Lumens point, are not organisms, but the communications between organisms. So I can be inside an ecosystem, but I'm not internal to it.

MZ: Right. It's like that example you gave of driving through one.

KW: Exactly. Then I'm inside it but I'm not internal because my communicative exchanges are hardly occurring. I mean, they are while I'm there, but I'm still not internal to it. My communication with other organisms can be part of the internal nexus that defines that particular system, that is, the agency-nexus of that particular system. That's entirely different than saying individual holons are parts of social systems in the same way that atoms are parts of molecules. That's categorically incorrect.

MZ: Right. I read Lumens book a month or two ago and Sean and I communicated about it.

KW: And his original social systems are still really just exquisite. And I go into all of that really carefully. In ecological communication, there are two places where he violates his own rule, and it's a long footnote, and I'll be going into that later, but on balance he was pointing out some very important stuff. There are even intuitively obvious reasons why individual holons and social holons follow different rules in many different ways. And the simplest is, as I've said, when my dog gets up and walks across the room 100% of his molecules walk with him. There's no social holon where that happens—that's not even vaguely the case. This is why the 20 tenets are specifically tenets that apply to an individual holon, and one dimension of an individual holon is the LR quadrant, or its social dimension. It feels, it is itself aware of its own social dimension that is a component of its own being. But the social dimension itself isn't another holon that itself

has four quadrants. In other words, the society called the United States does not have an interior dominant “I,” such that the United States gets up today and says “Well I feel good today. I think I’ll go over here and beat the fuck out of Iraq.” So that’s where it all falls apart.

Now, you can use the four quadrants not as something that’s constitutive of a holon, which I maintain that they are, but also, in a derivative sense, you can say that any holon can look at something else from its own four perspectives. Therefore, I can look at a social holon from its inside and its outside in its individual and plural forms. I can look at a tin can in that way, but the tin can doesn’t have an interior.

MZ: Right. And so in looking at a complex social holon, whether it be ecosystemic or socio-cultural, I can, as the observer—and this is Maturana—I can observe one of those complex systems and I can ascribe to it behaviors that look proto-teleological, and that it does look as if it has a kind of internal movement towards something. But the ecosystem itself, or the social system itself, lacks any capacity to do that on its own.

KW: Exactly, that was Maturana and Varela’s point about biological phenomenology: all sentient beings have cognition, but only a scientist has a rational cognition that apprehends systems. So that’s a very important distinction, and it’s certainly one that I embrace. So we have to distinguish between sentient beings having four perspectives, or possessing four quadrants, versus a sentient being looking at something else from those four perspectives. We cannot then attribute the four perspectives as an intrinsic component of what we’re looking at, because that is an anthropocentric view, because only human beings have that view. This is what Maturana and Varela were criticizing. They were criticizing systems theorists for imposing their cognition on the cognition of a frog, for example, which does not possess. A frog possesses a social feeling or perspective, and a cultural feeling or perspective, but not in terms of a system scientist.

So what we want to say then is that a human organism at level C complexity of Nature, capital “N,” is inside social systems at level C complexity, but is not internal to them.

MZ: Inside but not internal.

KW: It’s not internal. You can be inside, as my physical boundary is inside the physical boundary of a forest, but I’m not internal to the ecosystem of the forest because my level C interactions are not following the rules of the level C interactions of the forest. First of all there might not be any level C interactions in the forest, unless there are other primates in there—specifically humans.

MZ: So a human can be literally inside the space of an ecosystem, but not interior to its complex systemic functions.

KW: It’s not internal to it because it doesn’t follow the nexus agency. However, if I live in a forest, my level B cells, for example, are part, meaning partner, or members of that

ecosystem, which means that my cells are following the nexus agency of the ecosystem. That's what it means to be a member, or a "part" of an ecosystem.

So this is why in SES and Brief History I can play on the word "part" and it sometimes meant one and sometimes meant the other. The sentences are still true but you have to define what you mean by "part." So to put it bluntly, my body is a part of an ecosystem, meaning a partner or member of an ecosystem. But the biosphere in the UR quadrant is a constitutive component of the noosphere. And look at what that really means in the UR. I'm going to use Nature with a capital "N," because what freaks the ecophilosophers out is that we're trying to posit that there's something other than Nature. Remember that the interior quadrants are not on top of Nature, they're all *interior* to Nature. They completely missed this point in my argument. There's nothing beyond Nature. It's all inside Nature, interior to Nature. To say that the biosphere is a part of the noosphere means that a level B complexity holon of Nature is a constitutive element of a level C complexity of Nature. This is just saying that one level of Nature includes another level of Nature. That's all that noosphere transcends and includes the biosphere means. They read this and think that the noosphere is some film that has no connection with Nature. And that's categorically incorrect.

MZ: That's what I was trying to say to Rowe, basically that he's giving a view of grotesque subjective idealism. Now it is true that with some of your rhetoric you were trying to make a point that mountains and rivers are literally inside of us. Well, yes, but what do we mean by "inside"? They're not volumetrically inside. This is the point you're making about interior, internal, and inside. It's a collapsing of all three of those into volumetric.

KW: Exactly. This guy is a classic flatland theorist. For him hierarchy is nothing but volumetric.

MZ: It's incredible.

KW: It's scary. When he says "the purpose of a human being must be found ecologically in the role played vis-à-vis ecosystem," the only thing you can find there is survival. In other words, the whole meaning of human life is just to survive!

MZ: That's beige.

KW: Exactly. That's what I mean by the kind of reductionism that gets involved in that.

You actually brought up a good point in a conversation that you and Sean and I had a while back. It's when we were first talking about the distinction between an individual and a social holon and how only an individual holon can say "I," and that a social holon is a "we," but that "we" is only voiced by the member "I's" in it. And I said that that's the problem of creating Gaia as having an "I," a dominant monad, which is what these folks do, including Rowe and some others—they're conflating individual and social. You made a really interesting point about this. You said in most cases, when these theorists attribute

an “I” to something like Gaia, they’re actually projecting their ego—it’s *their* “I” that they’re talking about. They then project their intentionality into the system. I think that’s exactly right. It’s just like you say: “Let’s say that the ecosystem is the thing that comes first. What does it actually want?” And this is where they all start filling in what we’re supposed to do for the ecosystem, and it consists of *their* wishes and their desires.

MZ: It’s like, “Who speaks for the Jaguar?” “I do! I know what the Jaguar wants. It wants X. I speak for Gaia. Earth First.” Not so fast.

KW: Wherever there is an “I” that’s intuited there’s an ego, and so the people who are ascribing an “I” to Gaia are intuiting their own ego and saying “This is what Gaia wants.” Whereas, if you actually try and pin down what Gaia wants, other than just survival, well, you really can’t pin it down. All you’re coming up with is the ecotheorist’s own projections that they want to impose on others. And I think that’s where you rightly nail this guy for eco-fascism.

But the points for us are a couple. One is certainly what it means to be inside and internal, and that again plays on what I think are these very crucial differences between whole and part. And as you point out, I mention that there are at least four different types of wholes and parts, which we call individual holons, social holons, artifacts, and heaps. But the two important ones are individual and social holons. There are some similarities between those two, but there are crucially important differences between them. And no place does it come more importantly than in the discussion of ecophilosophy.

So what I think is really good for us is to be able to point out what it means to be internal, as a constitutive part, and that’s true only for individual holons. Atoms are parts of molecules are parts of cells in a very specific way that Whitehead and Lumen and several others have pointed out. Those parts at every level are in relational exchange with the same level of individual holons in their environment. That constitutes their social and cultural dimensions, and the four quadrants are the four dimensions of an actual occasion.

What becomes really problematic is coming up with words for matter, nature, biosphere, ecosphere, and so on, because what we want to try and preserve in the LR quadrant for example, is the notion that the social system goes all the way down along with the individual, and then it correlatively evolves. We use words like physiosphere, biosphere, and noosphere, but even those are a little bit problematic because the physiosphere, in the quadrant view, doesn’t mean insentient matter, because even atoms and quarks have a degree of sentience. It means non-reproducing, or non-sexually reproducing matter, for example.

MZ: Let me just make a point to come back to that...sentience pan-perspectivalism, when we get a chance.

And let me ask you this other question, because it’s right on this noosphere/physiosphere stuff. When you speak of biosphere as B in your bullseye diagram, biosphere, the way I

take it, would include both organisms and the social holon that corresponds to it. Am I right about that?

KW: Yes.

MZ: It includes both the individual and the social holon.

KW: What we're doing here—if we just use A, B, and C with three concentric spheres going through the four quadrants, in a loose sense—A means the physiosphere in all four quadrants, and B means the biosphere that runs through all four quadrants, and C means the noosphere as it runs through all four quadrants. The problem though, of course, is that what these levels actually represent are the levels of consciousness, the great morphogenic field. And those levels, which in metaphysical systems would be called the Great Chain, or roughly the Great Chain—we steer away from that because it's pre-Kantian; it's a metaphysical system and we're trying to go post-metaphysical—but each of the four quadrants has a different perspective and therefore a different “ontology” on these three levels. So the terminology that you and Sean were using is useful in that the level C, as it appears in the UR quadrant, would be called, let's say “neocortex.” Level C as it appears in the UL quadrant would be called “mind.” Level C as it appears in the LL quadrant would be called, for example, “worldcentric values.” And in the LR it would be whatever the social system is that's composed of those individuals at level C. That could be the actual physical grouping of the people on this telephone call right now.

Now we go down to level B. In the UR quadrant could be called many things, one of them would be “Limbic system.” In the UL quadrant it could be called “feeling,” and so on around. The difficulty, of course, even with words like physiosphere, biosphere, and noosphere, is that even when people say “biosphere” in common usage, they vaguely intuit that it means “life,” but life transcends and includes matter. So when they talk about ecosystems a lot of them say “We can't forget the planet and minerals and rocks. We can't leave those out,” etc., etc. So even “biosphere” means that it transcends and includes the physiosphere. And that's fine with me, but this is why it's so difficult in conveying what are essentially simple ideas because the words...

MZ: Right. When I think of biosphere, I think it has a Lower Right bias ultimately, and there's a tendency where people think, “Oh, ‘biosphere.’ That's ‘ecosphere.’ And that's a big system.” As organisms tend to vanish you end up with Earth as a giant organic cell. But I don't have an alternative to these names. I'm going to have to go back through the paper and make some clarification, but that's going to make this thing a 100 pages.

KW: I love this paper, and with a few little fiddles, it covers so many of the really important issues. What's going to happen is that as we continue this ongoing conversation, these concepts, and the words we use to convey them, are going to clarify. But right now, when people get to noosphere in the UR quadrant, they should be thinking about degree of complexity of physical matter. They should think triune brain, they should think neocortex. And in lower levels of mind, horses form images—horses are poking into the noosphere. All primates are having what would be called in the UL,

“mind,” and therefore they’re all participating to some degree in level C, and you can subdivide that. But in the UR, people need to start thinking in terms of levels of complexity, and in the UL, levels of consciousness. And so we’re not saying that the noosphere is detached from Nature. It’s a level C level of complexity of Nature.

In excerpt E and F, the one’s that I haven’t posted yet on the Shambhala site, I actually use, as an example, a family of great apes to run through the quadrants, to show how they’re related, what ecosphere means, biosphere, social system, etc.

So that’s what we need to deal with. Then what are constitutive parts in the UR have correlations because they’re members of social systems in the LR. That means they’re *inside* the social systems in the LR and the communications between organisms are *internal* to the social system, and that’s Lumen’s point. This is a very consistent approach that honors all of these different perspectives, literally makes room for all of them, but doesn’t confuse them, number one, and number two, doesn’t ignore some of the others that are equally important.

MZ: Right. What I got out of Lumen was...I’ve been reading a lot on contemporary social theory which takes off from Lumen and complexifies it and talks about Habermas and so on. Lumen nowhere denies that a human being is an organism that could be killed off. It’s possible. In other words he acknowledges that. But he’s a social theorist, not an ecologist. That’s not his topic. And so he points out right at the beginning of his book that it’s too bad that the people who are so concerned about ecological problems don’t take the matter more seriously in their theorizing about it. In other words, they are bone-headed, in effect, by not realizing that the biosphere can manifest itself only within the noosphere, and that it’s we who make assertions about it. And so our exchanges are these exchanges of communication, symbolic acts in which we speak to each other about what’s going on at this level that’s constituting us and on which we depend. This is the “clearing.” His version of the “clearing” comes from him being a strong LR type. But he’s talking about the clearing in which all of this stuff is appearing—frogs, and horses, and so on, have some kind of mental capacity, but they’re not reflecting on the biospheric crisis and worrying about it. That’s why I say in here, “to your credit,” you hang in there and say, “No, it really does matter that we’re really different.”

KW: And then in a way that most ecophilosophers don’t even do, and I know you agree with me on this, when we push the quadrants all the way down, we’re saying that frogs create a clearing for each other to appear cognitively as well as culturally and socially. We do that all the way down with atoms. I give an example of an electron doing that in SES. That’s much more ecological, if you want to call it that, than any of the stuff that’s out there, I mean it’s pushing it all the way down in a very coherent way.

MZ: Okay, well now that you mention it, it brings me to another issue I wanted to bring up. To what extent are we engaging in a kind of anthropomorphizing with this notion? And secondly, I’m in conversation now with many people, and I’ve been reading all of this stuff about supervenience, the whole question of are we trying to bring back pan-psychism, with Chalmers and his efforts, and there are other people now doing similar

types of things. They're trying to break through the limitations imposed by this supervenience notion where there's no real emergence, where what there are...it's still physicalism, where atomic structures are really the base and that there's no real evolution, there's no real development. There are simply different functions of atomic structures at different hierarchical levels. There's no real noosphere understood as something that really emerges unpredictably and so on. So to what extent can Whitehead, in your version of this prehension...how seriously can it be taken by physicalists who might take this type of capacity pretty far down? Certainly down to cells, maybe down to atoms, but they're going to stop before atoms and say, "Hey, look. Now your in metaphor." And that the capacity to be effected, to be causally interacted with, is not an analog to irritation or perception or whatever. How do we talk about this?

KW: Well my take on that, as I've always said, and I'm even a little bit uncomfortable with panpsychism...

MZ: I'm using the term panperspectivalism, everything has a perspective. That's what you've been saying.

KW: Everything has a perspective and at most you can say "pan-interiorism." In other words, people want to talk about interior and exterior—and by inside and outside at this moment I'll mean interior and exterior. So people want to say, "Well, does an atom have an interior, an inside?" And my only point has been that I don't care exactly how far down you push it. If you're not going to push interiors down, then don't push exteriors down either. If you're going to say that an atom has an outside, that has *no meaning* unless an atom has an inside. So if you're going to say "Inside becomes a mere metaphor way down there," then I'm going to say "Fine, so is outside." If you won't agree with that, then we'll just call it quits however far down you want to push it. You want to call it quits at cells? I'll take cells. And I make the same argument about singular and plural. So it makes absolutely no sense whatsoever to say that the foundational level is a bunch of outsides crashing into each other with no insides.

MZ: I think there's a real cool posting on Chalmer's site in the panpsychism section which talks about Whitehead. He said something similar. He said, the problem with...we were confronted with Cartesian dualism. Well the solution is not to get rid of mentality and interiority and then pretend that you can continue to talk about matter as if nothing happened, because those two are correlated. So now if one vanishes, so does matter. But then what are we left with? We have no vocabulary.

KW: And I told him my version of this argument sitting in the little glass room up in the Boulder house, and we went at this for about four hours, and he agreed that that was as good an argument as any, and I think it's just the simplest. It's like saying that the foundation of the world is places where people turn left and there's no right. It makes no sense, it has no meaning whatsoever. Or "the world is full of ups and no downs." I mean even quarks have top and bottom and up and down.

So at whatever point a theorist recognizes an outside then there's an inside, and I don't care where it is. I don't care whether it's with the apes or worms or quarks, that's where the four quadrants start. And like I said, I'm just not going to argue to the death about how far down it goes. I think it goes all the way down, and not because it avoids the emergent fallacy. I don't have any trouble with the emergent miracle. Emergence happens all the time. I don't even know why Whitehead argued that. He himself, in terms of his fundamental principles, listed the One, the many, and creativity. Creativity is another word for emergence, or novelty. Novel things emerge all the time. But insides and outsides go together as far as they go anywhere.

MZ: So in effect, you're making the assertion something like this: It's at least equally a strong metaphysical, and that means undemonstratable hypothesis, an empirically verifiable hypothesis, to state that there are only exteriors as it is to say that if you have an exterior you have an interior. In other words, your position cannot be accused of a crude metaphysical status because the alternative position has the *same problem*. And in fact, I think your position is more interesting.

KW: I think it's more interesting. It avoids a lot of problems. I think it's more elegant. And incidentally, things like "mind," or even "feelings," I think those are emergents. I think at some level of interiority irritation appears. At another level of interiority sensation appears. At another level of interiority feelings emerge. At another level of interiority images emerge. I think they're creative emergents. I think they're miracles! It's the miracle of Eros.

MZ: Now, you go strong in that way. Let me ask you this. How does this square with the supervenience issues? Will there always be a correlation at the atomic level in some way with these emergent qualities, these emergent levels?

KW: It depends on what you mean by "correlation."

MZ: Well that's right. That's the tough part. I'm still trying to understand supervenience in the way the Kim and all these other people are using it. I mean, global supervenience...I'm not sure I understand it all.

KW: To me it's just another concerted effort at quadrant absolutism. And again, it is hard to pin them down because the fact of the matter is that it's like the Marxist argument that superstructure is "determined by the base." It all rests in the meaning of the word "determined," and notoriously, nobody will tell you the meaning. And that's how you get this story going and how you keep it going. Strict causality falls apart, but if you mean mere influence, it's not interesting. And it's the same with Thomas Khun—just what role do paradigms have in bringing forth data? And I happen to think that the injunction is a very arguable version of that, and that's the one that he eventually settled on. In this case, what does "emergent stuff correlating with atomic" mean? There's always going to be atoms down there because the higher transcend and include them. You can always point to an atom ziggling instead of zagging and say "There. It's nothing but the zig. The

emergence is nothing but a zig.” It’s a standard rule of reductionism. I just don’t find that interesting at all.

MZ: But the literature that I’ve been reading...it gets incredibly complex because even the term reductionism has so many different meanings, as you were just indicating. But the point of the whole supervenience discussion...those who really adhere to it are committed physicalists. In a sense, it is kind of quadrant absolutist, they’re a kind of UR physicalist. They want to reserve a place for phenomenology, so there’s an UL with a lot of them, but the way of doing it...they don’t know how ontologically to accord the UL it’s own level of reality. It’s always so heavily tied to the UR that it’s as if they wish it would go away but they know that it won’t. So the physicalism commitment is crucial for the supervenience adherents in one way or the other.

Of course, you’re not an anti-physicalist.

KW: No. See that’s the joke. If you actually say “What exists in the concrete world?” Physics. Physical, because the neocortex is physical, the limbic system is physical. That’s it. Ontologically, when you look around, that’s it. That’s what the ecophilosophers and the supervenience folks are all hanging on to. “By God I can see it, therefore it exists.” I don’t disagree with that. I’m saying that interior to that are your own feelings about that, and those aren’t out there. So get real. Phenomenologically, you can’t reduce the one to other. So interiors go all the way down with exteriors to the extent that either of them have meaning. And then if you do a phenomenology of interiors without doing the interior reduction of taking whatever you feel and translating it into third-person its—which violates your own first-person reality—if you don’t make that violation, you won’t get stuck in the quadrant absolutism. But we can still come back to the things that they’re pointing to, which is “Well look at the correlations in the physical realm where there are all these things that we thought were transcendent,” and I go “I agree with you.”

MZ: Okay. Well what else did you have in your notes to bring up?

KW: Size. Size does matter. (Laughs) Let’s do this one quick because boy, is this a “forever” conversation.

The reason that the 20 tenets are explicitly for individual holons, and you know, even “individual” is the wrong term. I notice that a lot of the 20-somethings, when I talk to them, get this intuitively, which really makes me feel good because I feel that I’m really explicating something that’s really there in a sense. It’s there for yellow and higher. And so I think that a lot of the kids that are coming in are in some ways seeing this more clearly than I do. We still have to think our way around it. So, every time I say “individual” they go “No, that’s the name of the upper quadrants on an occasion.” And I go “Fuck. That’s right.”

There’s an occasion, one dimension of which is individual, and one dimension of which is social. So when I say that the 20 tenets refer to an individual holon it’s really referring to a holon, but it has these dimensions. Is that clear?

MZ: Well, could you speak of “compound individuals”? Although that leaves out the social...

KW: Exactly. Quadratic perception simply sees all of these simultaneously as parts of each other, so to speak. But, we know what we mean when I say that the 20 tenets refer to individual holons and not social holons. And there’s a reason. One of the rules is, for individual holons, “greater depth, less span.”

Now, there are several different relations between holons, both individual and social, as evolution occurs and as depth increases. The first thing to notice is that *span* is not the same thing as *size*. And so the diagrams here, and that Sean sometimes uses, I’m not saying they’re wrong, it’s just that you have to be real careful because they confuse two different things. Span, technically, in the definition given in SES, follows the definition that Koestler gave. Span is not the size of a holon. It’s the number of holons at that particular level. That’s span.

Now, you can draw correlations. You can track, as depth increases both in the individual and the social, certain changes that occur in span and size. So the span, if you look at increasing depth in an individual holon series, for example atoms to cells to molecules to organisms, one thing is always constant with no exceptions, that is, the span gets smaller as depth increases. So the number of cells will always be less than the number of molecules. No exceptions.

Now, if you look at the size of an individual holon, they often get *bigger*. A cell is bigger than a molecule, usually. An organism is bigger than a cell, usually. But that’s why that’s not part of the rule, because size doesn’t follow rules. There’s actually one of the sections in SES that’s actually called *Size, Span, and Embrace*.

MZ: What chapter is that in?

KW: Chapter 4. But I’m giving an updated version of it here, because I only mention it in SES, but I think it becomes more clear now that people have thought about it.

If you look at a social holon—and let’s take galaxies to planets to ecosystems to families—the one thing that happens almost all the time is that the size of a collective holon is smaller than its predecessor. We’re not talking span here. We’re talking size, spatial extension. Now if you look at Jantsch’s original diagrams on individual and social, the vertical axis is always spatial extension. He’s talking not span, but size.

And so what happens there is that in an individual holon, where the number of them, that is to say the span, becomes smaller, the size of the collective becomes smaller. And there’s a reason for that. If you have an ecosystem, for example—now we’re talking size, not span—an ecosystem is always going to be smaller than a planet because the physical components of an ecosystem, level A, can’t overrun the boundaries in the physical components in its container. That’s why, indirectly, the size of social holons gets smaller,

vis-à-vis their previous holon, but span, the number of them, often increases. There are several ecosystems on a single planet, for example.

MZ: Well, now what about the human holon as we move from tribe to nation state? This is greater span right? But you could also argue that the sheer size of the social organization...

KW: That's why you can't draw correlations. That's why the 20 tenets refer to individual holons and not social holons, because much of the laws governing social holons are accidental. So, for example, when the first tribe appeared on the face of the planet, the span was 1. But tribes spread all over the globe. So the size got bigger and bigger and the span got bigger and bigger. So you can't make correlations because span can change dramatically, just depending on growth at the same level, for example. What doesn't change is in the individual holon, the number of holons at a level, whether that's interior or exterior, will always be fewer than the number at the previous level. You can take something like concrete operational and formal operational. Every formal operational rule incorporates dozen of concrete operational rules. There's always fewer, the greater the depth. But that's the only rule that holds absolutely. That's why you have to be careful.

Now because size often correlates in social holons, that's why we tend to say as individual holons have more depth then the actual size of the collectives becomes smaller. And that's because they can't overstep the lower bounds. So it's true that families are smaller than ecosystems, ecosystems are smaller than planets, planets are smaller than galaxies. That's size.

MZ: But the size issue is slippery.

KW: That's correct.

MZ: Span is a better way to try and communicate this. An ecologist wrote this famous book called "Why Big Fierce Animals Are Rare." And the reason that they're rare is because as you reach the top of the tropic pyramid, you end up with fewer and fewer instances of these big complicated creatures because they depend upon many, many more instances of organisms below them on the food chain.

KW: That is one of the 20 tenets.

MZ: So the analogy, even in the ecosystem folks, goes something like this: there are uncountable numbers of bacteria in terms of span, which are very tiny, but there are many fewer of the organisms that eat those bacteria.

KW: The rules that govern social holons are derivative in both span and size. They're derivative to the one absolute rule, which is that in an individual holon, greater depth means less span. There are no exceptions to that rule. That's why it's one of the 20 tenets. But if you look at the size of the collectives, then the size of an ecosystem, for example,

is smaller than the previous level. An ecosystem can't be bigger than a planet. It's not because whole planets are part of whole ecosystems. That's not the way it works at all. Social holons don't internalize that way. But it can't be bigger because its constitutive elements can't overrun boundaries. So its rules still devolve to those 20 tenet rules about individual holons. Span—the number of particular social holons—that varies dramatically. Sometimes it's bigger, and sometimes it's smaller—in terms of the actual number of colonies. You can look at the number of colonies of a particular bacteria, and there might be one colony on the planet, but if it takes off we could have a billion bacterial colonies all over the planet.

So a lot of those relations are accidental. That's why you have to be careful. But it's still true that the size of social holons becomes smaller, and it's useful to talk about that because that's where people get confused. They want to try and build these holarchies based just on size. And when they use bigger ones, they end up privileging them—the bigger ones being better, which is what Rowe does. They will privilege galaxies over planets, planets over ecosystems, and ecosystems over families.

MZ: Right. Well, what about his claim...he talked in here about social systems like Western modernity. Can it really be regarded as an advance over other ones because there's only one example of it? I forget where it was in his essay where he's talking about this.

KW: Well see if you can find it. What I like about your paper is that at the end it talks about "which of the three value structures is he talking about? Ground value, intrinsic value, or extrinsic value?" And I thought you used that as a way to show certainly my position, and I think it's the one that we all agree on, which is that there's some truth to what all of these folks are saying. And I particularly found when we got to the last couple of pages here, I wrote in the side bar that "To me, these pages are the essence of my approach. All of these people are right." You're going down and saying that some people are talking about intrinsic value, and with this, intrinsic value increases with greater depth in evolution. But with extrinsic fundamental value, an atom has more fundamental value than an ape. And they both have *equal* ground value.

MZ: Right. I found the spot. Rowe is talking about Feebleman's 5th law. Rowe writes that "The 5th law for an organization at any level—it's mechanism on the level below, it's purpose on the level above—is now for the organic hierarchy," whatever that means...I suppose he means individual organism... "It makes little sense that the developmental evolutionary, sociological, cultural, and mental systems," in other words, whether or not they're organisms. Now he says that he agrees with law #8, "The higher the level, the smaller it's population of incidences applies to hierarchies that aggregate upward, as well as for most ecological food pyramids," as we've just agreed, "but it's dangerous when applied to cultural evolution because, for example, it justifies the hegemony of the Western system. The fact that the Western system has few variants, small populations do not automatically confer the title "higher" upon it, unless one follows Marx and Wilber."

KW: Yes. As we said, increase in depth in social holons doesn't follow any particular intrinsic rules, because so much of what happens in a social holon is accidental. The only thing that we talked about is that in the physical realm, it can't overrun the boundaries of its lowest constituents. But other than that, there are very few rules that are followed. But in terms of actual value structures, that's very, very different. And we already argued, in terms of cultures, that there's levels and lines in cultures. Some cultures are much more evolved in some areas and not in others. So you can't just say "A culture has a value." The only way you can look at intrinsic value is in individual holons, and then we can say that categorically, a molecule has more significance than an atom, but an atom is more fundamental than a molecule. But when they get together and you start looking at the social forms of that, you can have a culture that is cognitively yellow and morally red. How are you going to compare that to a culture that might be cognitively blue and morally blue?

MZ: So are you saying that the terminology of intrinsic value, then, really only applies to compound individuals understood in terms of the quadrants, and not so much to social holons?

KW: Exactly, because social holons are simply an aggregation of, a membership of, individual sentient beings, and the sentient beings themselves are levels and lines. That's why all of these things apply primarily to individual sentient holons and why, again, you can't apply the same things to social holons. If an individual and a social holon were the same, then you would be able to judge cultures directly. You could say "That culture is here on this scale and this culture is not and therefore this culture is better than that culture," and it just doesn't work like that at all.

So, like I said, all I would be careful about here is the size and span thing. What I'm saying is that by taking the four different relationships you can find very interesting tendencies, but there's only one that's an absolute.

MZ: The four different relationships being span vs. depth, individual vs. social.

KW: Yes. Size and span in the individual and social as they increase in depth. I'll run through these relationships very quickly. On an individual holon, greater depth, less span. That's the one absolute rule. On an individual holon, greater depth means the size is also larger, usually. On a social holon, greater depth means smaller size and greater span, usually. Span often increases. I'll give you an example of where you have to be careful. Let's take the social holon "planet," and let's take the social holon "ecosystem." And let's talk span. The size goes without saying—an ecosystem is equal to or smaller than a planet. But when life first started there might have been one ecosystem and one planet. But pretty soon there are 12 ecosystems and one planet. Span is accidental in that sense. That's why you have to be careful.

Those are generally the relationships though. One of them is absolute, one of them near absolute, and that's that size is smaller in social holons because it can't overstep the

boundaries of its constituents. But you can find bizarre exceptions to that, I believe. Nonetheless, those are the tendencies.

The problem is that most eco-implicit hierarchies go: atoms, molecules, cells, organisms—because those keep getting bigger—and then it goes “families, ecosystems, planets, galaxies,” because those keep getting bigger, and those go right down the scale into the basement of less depth. And that’s the main problem.

I dealt with all of that by just using one notion of size, and I think it actually works out pretty well, but we want to sit down and make sure that we’re real clear about this, and that’s why I make these distinctions in a finer grain. All the conclusions still hold up, but we know exactly what we’re talking about now.

MZ: Let me just ask you to go over this one point again. Why is it that the social holon can’t be bigger than it’s constituents? I mean an ecosystem can’t be bigger than a planet because the ecosystem came first and physically then, it would make no sense. You would have to have something in addition to the planet to have the ecosystem be bigger than it.

KW: Right. And families can’t be bigger than the ecosystem. But it’s not because families contain ecosystems. It’s not because ecosystems contain planets. It’s that the *members* of families contain constituent elements in ecosystems. And so the components of an organism in a family transcend and include the components in an ecosystem. Therefore, the part that’s included from the ecosystem can’t step out of the ecosystem. That’s why a family can never be bigger than an ecosystem that some of its constituent elements are members of. The same can be said with ecosystems and planets, and planets and galaxies, and that’s why Jantsch could indeed have his two diagrams with spatial extension being the vertical axis. I’m saying that the internal relationship is not that ecosystems are parts of families and families are parts of ecosystems. That’s confusing and that’s what Lumens says not to do. I’m saying that that relationship comes about because the individual holons transcend and include their predecessors. In other words, individual holons are members of social systems that therefore derivatively have the characteristics that we just described as smaller size.

MZ: So the entire whole/part structure is so incredibly complicated and so easily screwed up. As you said, it is “simple” in effect, but it’s incredibly difficult to keep sorting it out.

KW: Span is the one that, as I say, has a very specific meaning in an individual, and we can use that as a “no exception to the rule.” But size, in an individual holon, *tends* to be larger. And that’s how I phrase it when I give those examples in individual and social. I say it *tends* to be. Whereas when I give examples of depth and span I say “There are no exceptions to this rule.” Size in an individual tends to get bigger. Atom, molecule, cell, organism—they get bigger because they transcend and include, they physically envelop, and therefore they get bigger. And what the well-intentioned ecophilosophers want to do is say “Ah. Well a family is bigger than an organism, so an organism is part of a family.

Oh, and an ecosystem is bigger than the family, so the family is part of the ecosystem.” And they just want to keep getting size bigger and bigger and bigger. That’s where the mistake occurs. They run up the size, and the problem is that increasing depth in a social holon gets smaller, not bigger.

So they’ve got increasing depth up to organisms and then increasing shallowness up to the physiosphere. And that’s why you end up with exactly what Rowe ends up with: a value system of beige. Right down the ‘ol scale into the basement. And that’s what everybody is supposed to adopt. It’s crazy.

E-Mail follow-up:

MICHAEL,

THERE WAS NO ATTACHMENT, BUT I JOTTED DOWN A FEW NOTES TO THE GENERAL THEMES. THIS WAS WRITTEN ON THE RUN, HOPE IT MAKES SESE. SO MUCH EASIER TO TALK ABOUT THESE THINGS, BUT SEE IF THIS HELPS...

I know you're super busy, but I want to run this by you. It's a paragraph from the "final" version of the Rowe vs. Wilber paper. Social holons decrease in span (number) through the course of evolution. Is that correct? Or is it?

NOT EXACTLY. REMEMBER, THE 20 TENETS HOLD FOR INDIVIDUAL HOLONS, ONE OF WHOSE DIMENSION IS SOCIAL.

BUT "SOCIAL HOLONS" ARE LOOSER ANIMALS. THE CORRELATIONS I OUTLINED ON THE ECO CONCALL--WHICH THANK GOD WE RECORDED AND POSTED BECAUSE I THINK I FORGOT MOST OF IT ALREADY--ARE ROUGHLY:

IT IS ALWAYS THE CASE THAT IN INDIVIDUAL HOLONS, THE SPATIAL SIZE IS BIGGER (MOLECULES BIGGER THAN ATOMS), THE SPAN (#) IS ALWAYS SMALLER (FEWER MOLECULES THAN ATOMS).

BUT SOCIAL HOLONS ARE NOT IN THE SAME NECESSARY RELATION TO THEIR PREDECESSORS, BECAUSE MUCH OF THE CHARACTERISTICS OF SOCIAL HOLONS ARE DETERMINED BY INDIVIDUAL HOLONS THAT CAN COME INTO AND OUT OF THE SOCIETY. E.G., AN INDIVIDUAL CANNOT GO FROM RED TO ORANGE, BUT AN INSTITUTE CAN (JUST HIRE MORE ORANGE PEOPLE AND FIRE RED).

BUT THERE ARE TRENDS. THE STRONGEST IS THE ONE NOTED BY JANTSCH: IN SOCIAL HOLONS, THE SPATIAL SIZE (THIS DOES NOT MEAN # OR SPAN!!!) IS ALMOST ALWAYS SMALLER (PLANETS SMALLER THAN GALAXIES). HENCE HIS TWO TRENDS: INDIVIDUAL SPATIAL SIZE GETS BIGGER, COLLECTIVE SIZE GETS SMALLER. REMEMBER HIS CHARTS ARE ABOUT SPATIAL EXTENSION.

IN STUDYING JANTSCH, I NOTICED THAT THE REAL REGULARITIES WERE WITH SPAN, AND SPATIAL EXTENSION WAS MERELY A SUBSET OF THAT. SO YOU HAVE TO TRACE EACH SEPARATELY. JANTSCH WAS FLATLANDING THE WHOLE THING, SO HE DIDN'T PAY ATTENTION TO WHAT HAPPENS IN INTERIOR EVOLUTION. SO YOU HAVE TO DIFFERENTIATE SIZE (WHICH APPLIES TO RH) AND EMBRACE (LH), AND TREAT BOTH IN RELATION TO SPAN OR THEIR #.

IN INTERIOR QUADRANTS, FOR EXAMPLE, CONCEPTS ARE NOT BIGGER THAN SYMBOLS, BUT THERE ARE ALWAYS FEWER OF THEM, BECAUSE EACH CONCEPT TRANSCENDS AND INCLUDES DOZENS OF SYMBOLS. SO YOU HAVE TO STATE THIS AS DEPTH AND SPAN, NOT SIZE. JANTSCH WAS, OF COURSE, CAUGHT IN RIGHT HAND FLATLAND SO DIDN'T LOOK AT INTERIORS.

HENCE THE SECTION IN SES ON "SIZE, SPAN, EMBRACE." WHICH I UPDATED IN THE CONCALL AND HERE....

TO RETURN TO SOCIAL HOLONS, THE SIZE GETS SMALLER (JANTSCH'S POINT)--AND IT DOES BECAUSE THERE ARE FEWER INDIVIDUAL HOLONS AT THE HIGHER LEVELS (COMPARED TO LOWER LEVELS), AND THEREFORE WHEN YOU BRING TOGETHER HIGHER HOLONS (E.G., MOLECULES) INTO A GATHERING (E.G. PLANETS), THE GATHERING IS SMALLER THAN A GATHERING OF LOWER HOLONS (E.G. PLANETS OF MOLECULES ARE SMALLER THAN GALAXIES OF ATOMS).

THAT IS THE SINGLE 'INTRODUCTORY' FORMULA I USUALLY USE--FOCUSING ON SIZE, EVEN IF TALKING ABOUT SPAN--BECAUSE THAT IS WHERE 99% OF ECOTHEORISTS GO WRONG. I.E., WHERE THE SIZE OF INDIVIDUAL HOLONS GETS BIGGER, THE SIZE OF SOCIAL HOLONS GETS SMALLER.

THE THING THAT CONFUSES THE ECOTHEORISTS IS THAT THEY LEAVE OUT THE INTERIORS. IF THEY INCLUDED THOSE, AND THEN USING THE SAME FORMULA THAT APPLIES TO THE RH, THEY WOULD FIND: AN INDIVIDUAL HOLON/CSNESS [ed. Note: CSNESS = Consciousness?]-ITS IDENTITY--GETS BIGGER--EGOCENTRIC TO ETHNOCENTRIC TO WORLDCENTRIC; WHILE THE SPAN (THE #) OF THOSE WHO CAN DO SO GETS SMALLER.

IN THOSE TWO PARAGRAPHS LIE THE ENTIRE CONFUSION OF THE ECOTHEORISTS. AND THE REASON MOST OF THEM ARE INADVERTENTLY REGRESSIVE, WHICH IS ECOLOGICALLY DISASTROUS.

NOTICE, AS A FN, THAT THIS DOES NOT MEAN THAT ALL HUMANS CANNOT POTENTIALLY EVOLVE TO WORLDCENTRIC. IT ONLY SAYS THAT THE SPAN OR THE # OF WORLDCENTRIC HOLONS IN HUMANITY WILL ALWAYS BE LESS THAN THE # OF ETHNOCENTRIC HOLONS IN HUMANITY, BECAUSE EACH WORLDCENTRIC HOLON IN ME INCLUDES AND EMBRACES NUMEROUS ETHNOCENTRIC HOLONS IN ME (E.G., EACH ORANGE HOLON IN ME INCLUDES DOZENS OF BLUE HOLONS IN ME--THE EXACT CORRELATE OF FEWER MOLECULES THAN ATOMS). BUT THEORETICALLY ALL HUMANS COULD EVOLVE TO WORLDCENTRIC LEVELS. AND WE HOPE THEY DO. THERE WILL STILL BE FEWER WORLDCENTRIC HOLONS THAN ETHNOCENTRIC HOLONS.

ANYWAY, JANTSCH FOCUSED ONLY ON SPATIAL SIZE (WHICH IS A GOOD START). BUT WHEN WE TRACE BOTH SIZE AND SPAN (IN ORDER TO BE ABLE TO DISCUSS INTERIORS THAT DO NOT REALLY INVOLVE SPAN AND SIZE BUT SPAN AND EMBRACE),

THEN WE FIND SOME MORE INTERESTING FOOTNOTES TO ALL THIS. AS I INDICATED, WITH INDIVIDUAL HOLONs, INCREASING EVOLUTION BRINGS BIGGER SPATIAL SIZE (RH) OR BIGGER EMBRACE (LH), BUT ALWAYS SMALLER SPAN (# AT THAT LEVEL COMPARED TO # AT PREVIOUS LEVEL). MOLECULES ARE BIGGER AND FEWER THAN ATOMS (AGAIN, THAT'S WHERE EVERYBODY GETS CONFUSED AND HOPELESSLY LOST...)

WITH SOCIAL HOLONs, WE USUALLY SEE SPATIAL SIZE GET SMALLER (JANTSCH). BUT SPAN--THE ACTUAL # --CAN INCREASE, AND OFTEN DOES.

E.G., WITH REGARD TO PROKARYOTIC GAIA SYSTEM AND, SAY, COLONIES OF EUKARYOTIC STAPH, WE SEE: THE STANDARD SMALLER SIZE HIGHER SOCIAL HOLON (BACTERIAL COLONIES--A MILLIMETER OR SO) ARE SPATIALLY SMALLER THAN GAIA. BUT THERE ARE A TON MORE OF THEM. LIKewise, THERE ARE USUALLY MORE ECOYSTEMS THAN PLANETS, MORE FAMILIES THAN ECOSYSTEMS, ETC. ALSO, ONCE ON A GIVEN LEVEL, SPAN (#) STARTS OUT SMALL BUT CAN EXPLODE TO HUGE NUMBERS. BUT REMEMBER, SOCIAL HOLONs ARE NOT "REAL" HOLONs, BUT A DIMENSION OF INDIVIDUAL HOLONs, WHICH IS WHY YOU CAN'T PIN THEM DOWN QUITE AS WELL.

BUT IN GENERAL, WITH SOCIAL HOLONs WE OFTEN SEE, GREATER DEPTH, BIGGER SPAN, SMALLER SIZE. THE THING THAT VARIES THE MOST HERE IS SPAN, BECAUSE THE NUMBER OF ASSOCIATIONS (I.E., SOCIAL HOLONs) AT HIGHER LEVELS CAN GO IN ALL SORTS OF WAYS DUE TO ALL SORTS OF FACTORS. WHAT WE ALMOST ALWAYS SEE, HOWEVER, IS GREATER DEPTH, SMALLER SIZE (IN THE RH).

INDIVIDUAL HOLONs ARE MORE PREDICTABLE DUE TO DOMINANT MONAD. THEREFORE, WE ALMOST ALWAYS SEE, GREATER DEPTH, SMALLER SPAN, BIGGER SIZE/EMBRACE. (WHICH ALWAYS MEANS, IN COMPARSION WITH PREVIOUS LEVEL)

SINCE THE 20 TENETS HOLD FOR INDIVIDUAL HOLONs, I SELECTED THE ONE CONSTANT THAT ABSOLUTELY NEVER CHANGES: GREATER DEPTH, LESS SPAN. SO OF ALL OF THESE, THAT'S THE ONE I LISTED IN THE 20 TENETS. THERE ARE NO KNOW EXCEPTIONS TO IT.

A FEW LAST ITEMS:

How many large-scale clusters were there after the Big Bang?

DON'T KNOW. BUT REMEMBER THE LOOSEY GOOSEY NATURE OF SOCIAL OCCASIONS.

And don't the number of stars increase?

YES. RECALL, SAME LEVEL INCREASE IN SPAN OF SOCIAL HOLONs IS THE GENERAL RULE.

And aren't there more ecosystems on the planet today than 600 million years ago?

DITTO.