Constellations and the Evolution of Worldviews Part Two: Time, Space, and Consciousness

by Michael Reddy, Ph.D, CPC www.reddyworks.com <u>michael@reddyworks.com</u> Rev 6, begun 10/5/11

Picking up the Threads (sidebar)	2
The Dual Network Model	2
A Worldview for Constellation Effects	4
Relativity and Early Quantum Physics	5
Later Quantum Discoveries	6
Quantum Confusion	7
Conscience, Historical Trauma, and Scientific Reality	9
Constellating the Intellectual Tribes	8
Parapsychology—the Great Exclusion	11
Conclusion—if Consciousness Comes First	12
References	13
Biography, Acknowledgements, and Endnotes	15

Picking up the Threads [Sidebar]

The scientific mainstream prejudges Family Constellations as "impossible." **Part One** of this series (Reddy, 2011, pp. 55-63) began a three-part sketch of the origins if this view, and contrasted them with an emerging, also empirical perspective that is far more supportive. I singled out five effects we observe regularly in our work (See Figure One).

Scientific materialism is a paradigm that organized vast growth in human knowledge. It created a cohesive social system designed to maximize its explanatory power. It marginalizes whatever it cannot explain (Reddy, 2011, pp. 56-57). Historically, however, findings that challenge such a paradigm always do accumulate. Eventually, an intellectual and social upheaval gives rise to a new, more inclusive integration (Kuhn, 1962).

Part One showed how, in the previous upheaval, a feminine, organic, deeply interrelated view of Nature was replaced by the mathematical, mechanical, "clockwork universe" (Reddy, 2011, pp. 57-58). Blind adherence to its seven core assumptions, however, creates not science but "scientism" (Reddy, 2011, pp. 58-59). The dialogues we seek to have must be with genuine scientists, not "scientism-ists."

In our own work, similar tension between paradigm ("the orders of love") and phenomena ("see only what is") exists. **Part One** pointed out that all our perceptions are highly structured by culture, language, and individual experience—**before we even become conscious of them** (Reddy, 2011, p. 60-61). In essence, whether it is science, the growth of our own systemic philosophy, or the carrying out of individual constellations—success involves the same process—careful application of **top-down** generalities balanced by openminded, fluid, **bottom-up** attention to particularities (Reddy, 2011, p. 59, Figure One). Mind and intuition "zig-zag" up and down.

The Dual Network Model

In an effort to improve understanding and communication, **Part One** of this series (Reddy, 2011, pp. 55-63) laid out the dichotomy between scientific materialism and the effects we observe in constellations, and then previewed emerging empirical studies that are more supportive. It explored the role of paradigms and **top-down** versus **bottom up** thinking both in science and in our systemic work (see Sidebar).

In **Part Two**, I will begin to flesh out the suggestion that we look for explanations of our five constellation effects initially in terms of two forms of networks—"local" and "non-local." The term "network" is useful because it specifies any arrangement of hubs and interconnections capable of transferring energy or information—regardless of how that arrangement might be embodied. The local network works through reasonably well-understood interactions between human organisms. It has two configurations of interest to us. One is the workshop circle, facilitator, client, and the actual configuration of representatives on the floor. The other is the physical family of the client—its historical unfolding in the flesh.¹ Looking closely at this local aspect will concern us in **Part Three**.

In **Part Two**, we focus on the other kind of network. It is very different, still somewhat mysterious, but, most importantly—increasingly necessary to physical science as a whole. Though I called it "remote" in **Part One**, here I am following more accepted usage—and thus calling it "non-local." This connotes not "far away," but rather *largely unaffected by time and space*. And it designates a vast, intimately interconnected substratum that gives rise to physical reality. In fact, we don't know how it is "embodied"—but, somehow, it has to exist.

> Representative Perception—complete strangers display feelings or traumas of absent or deceased family members. EXAMPLE--Representative for client's father feels one leg go numb; client then says, "Oh, Dad lost that in the war."

- Familial Entanglements—client's lives are shaped by unresolved experiences in the lives of relatives who are at times unknown to them. EXAMPLE—Client with incurable migraines finds that an uncle died young from an accidental head injury. Blame embittered the family thereafter. The headaches "remember" this disorder.
- Induced Systemic Healings—patient and respectful restoration of harmony among those representing the family frees or heals the client. EXAMPLE—After representatives for the parents of the lost uncle in (2) forgive each other, and mourn their child's early death, the client's migraines tail off over two months.
- Cascading Resolutions—the same restorations often produce uncanny shifts in the lives of family members who know nothing of the constellation. EXAMPLE—the representative for a homeless, long addicted son reconciles with the representative for his father in his mother's constellation. Unaware, 2 weeks later, the son enters rehab.
- Effective Personifications—symbolic attachment to representatives of elements like "the disease" or "a new job" produces valid information and transmits effects. EXAMPLE —the representative for daughter's chronic eczema attaches to grandmother, and then leaves the constellation during the resolution. The eczema responds suddenly to cortisone cream, and disappears within months.

Figure One—Observed Constellation Effects

A Worldview For Constellation Effects

The clockwork universe of classical physics rests on the assumption of absolute, grid-like time and space. Forces, matter, and energy can affect each other only when they have moved to the same "place," and that takes "time." In the extreme positivist form of this view, nothing else exists, and everything, including human beings and consciousness, must be explained by interactions of these three. Thus conceived, if representatives in constellations are not talking, seeing, smelling, touching, or emanating electromagnetic waves (that is, if they are not using the local network)—then they cannot interact even with one another, much less distant or dead relatives.

For **representative perception** to make sense, what would be needed? Human beings in the constellation would have to access valid information in a way that bypasses space and time. Living members of the family system are not present. Some events and issues are not current. And some members are no longer even alive. If **resolutions cascade** and positively affect family members alive but not present, then the representatives and/or the workshop as a whole must also create access for these people to information that bypasses at least space.² Indeed, if resolutions actually change the state of members no longer alive, then the meaning of time and space, not to mention death—simply cannot be as classically conceived.

I have called the healings that affect the client "**induced systemic**" because, in my view at least, it is the cascade of effects to and from the whole family system (and not merely the client's local experience) that makes these healings happen. The changes to a whole system, again unconstrained by time and space, feed back and now support (as opposed to burden) the client. **Effective personifications** also reach forward and backward in time. The behavior of a representative for "the new job" can show both the systemic block (past, present), and the way forward (future). In the end, only **familial entanglements**—via bonding and, increasingly, also epigenetics— have any chance of being explainable in the classical materialist worldview.

A new empirical perspective, then, that supports our work has to be one in which particles, forces, time, and space all become what are called "epiphenomena." That is, just as physicists now tell us that the apparent solidity of a chair (the epiphenomenon) is a useful everyday illusion, but actually consists of tiny atoms vibrating with vast volumes of empty space between them—so a worldview favorable to us is going to have to say that particles, forces, time, and space are useful technological illusions that arise from some deeper actuality. An actuality, for example, so well interconnected that it can achieve what we experience as instantaneous access, via our human bodyminds, to almost anything strongly relevant or resonant. What's interesting here, as well as awe-inspiring, is that this is where so much open-minded science is heading—independent of our needs.

Relativity and Early Quantum Physics

Physics, that most material and empirical of sciences, has run head on into experimental results that require much the same kind of deeper version of "reality" that we do. Included in these developments is a collision with what it considers to be the ultimate epiphenomenon—consciousness itself. Here are some major steps in this century-long evolution.³

<u>Space Time Interdependence</u>—To make sense of decisive experiments, Albert Einstein had to conclude that the uniform grid of space actually shrank the faster one traveled, while the tickings of the iconic clock got further apart. Observers moving differently could perceive two events in reversed time order. For each, a different one came first. This was called "special relativity."

<u>Gravitational Warping</u>—For Newton, gravity was a pull exerted by massive bodies on one another dependent upon distance. But if space-time stretched and shrank, then gravity too should be different for different observers. But it doesn't behave that way. In his "general relativity," Einstein resolved the problem by changing his blended space-time even further. The tendency of bodies to attract one another, he said, was actually a curving or warping of space-time created by their mass.

<u>Discontinuous Energy Emissions</u>—Max Planck explained other anomalous results by pulling a size constant out of thin air. If, he declared, we assume that atoms can only radiate energy in discrete packets, or quanta, based on this exact size—then these are explained. Scientists scoffed until Einstein resolved a different sub-atomic problem using the same size constant. As more and more explanations came to depend upon "Planck's constant," quantum theory was born.

<u>The Wave-Particle Duality</u>—as quantum theory evolved, not merely light, but eventually matter also was shown to manifest as particles sometimes, and as waves at others. As particles, matter could be located, roughly at least, somewhere in space. But waves, even though they might be bigger near some location, were actually spread out everywhere. And they interpenetrated by adding to and subtracting from one another. In the light of this, was separation (even in blended, warped space-time) really as fundamental as had been thought?

<u>The Observer Effect</u>—An even deeper problem arose when something truly unprecedented was discovered. Whether sub-atomic entities manifest in wave form or in particle form depended totally on experimental choices made by scientific observers. Physicists were forced to declare that—until observation coalesced it into physical form—the entire subatomic universe existed only as an immaterial fuzz of probabilities. Was conscious awareness co-creating the external world? Rosenbaum and Kuttner, two very grounded physics professors, sum up these results as follows:

A photon, an electron, an atom, a molecule—in principle any object can be either compact or widely spread out. You can show something to be either bigger than a loaf of bread or smaller than an atom. You can choose which of these two contradictory features to demonstrate. The physical reality of an object depends on how you choose to look at it. (Rosenbaum and Kuttner, 2006, p. 67—italics theirs)

Later Quantum Discoveries

As these kinds of paradoxical results accumulated, scientists and philosophical "realists" alike struggled to make sense of them (Platonic "idealists" rejoiced). If linear space and time were not fundamental features of the physical world, from what did they then arise? If the free choice of physicists caused something interconnected and immaterial to crystallize out into one form versus another—then how could "the world" be objectively "out there"? At the same time, even as the interpreters were baffled, the equations worked perfectly—and led to both further paradoxical experiments and astonishing new technologies..

<u>Quantum Entanglement</u>—Though the maximum speed limit for energy and information flow is that of light, some pairs of particles ignore it. A measurement on one can determine the outcome of a second measurement on an arbitrarily distant, "entangled" particle *instantaneously* (Schumacher, 2009, p 55-58). How do they know to behave the same way if there is literally no time to communicate? Are two thus entangled particles, even if galaxies apart, not actually separate entities?

<u>Quantum Coherence</u>—Near the temperature of absolute zero, electrons in a wire lose all individual identity, and thus joined, become able to "superconduct." They flow without any resistance. Giant magnets are built this way (Rosenbaum and Kuttner, 2006, p. 121). Even at room temperature, a laser assembles light waves of all the same length, whose peaks and troughs are all exactly aligned. This "coherent" light can perform all the "laser" miracles ordinary light cannot. While separation in space is losing its meaning, sub-atomic "bonding" is proving to be a gold mine.

<u>Holography</u>—When a coherent light beam is split, and one half is directed straight to a photographic plate, while the other reflects from an apple (for example) to the plate—the waves add and subtract to form a meaningless "interference" pattern of squiggles. But shining the same coherent light on that pattern produces the well-known 3D image viewable from any angle. Chop the squiggles into smaller chunks, and each one reflects, not smaller pieces of the apple, but rather fuzzier pictures of the whole apple. So each part of the squiggles contains the whole. It turns out that the amount of information that can be stored in wave interference patterns, and the kinds of access involved are truly revolutionary (Talbot, 1992).

The Zero Point Field—The equations of quantum theory had a funny term in them that implied that some energy was still present at the temperature of absolute zero. Since this was thought to be, by definition, "impossible," earlier physicists simply subtracted this amount to make things work out right. Later generations, however, took this term more seriously. This resulted in the notion that energetic wave interference patterns, constantly arising, constantly canceling each other out—were at the root of the physical universe. There have been well-funded research programs, on the one hand, to tap this immense energy source for space travel (McTaggert, 2008, p. 34-35). And on the other, serious theorists look into the possibility that this all-pervasive "zero point field" could, in a kind of cosmic hologram—be recording a history of the entire universe (McTaggert, 2008, p. 26).

Quantum Confusion

Ultimately, this new physics has proved to be the most well-verified and productive theory ever formulated. It has opened up a Pandora's box of inventions that alternately dazzle and terrify us. Beyond holograms and superconductors, think of transistors and MRI's. Think also of nuclear power and atom bombs. At the same time, it has left scientists, and the to some extent the public alike, peering into a landscape frighteningly like Alice's wonderland (Wolfson, 2000, pp. 89-136; Rosenbaum and Kuttner, 2006; Schumacher, 2009). As we might expect, based on Kuhn's model of historical paradigm shifts (Reddy, 2011, pp. 56-57), a confusing intellectual and social upheaval is in full swing.

The advancement of human knowledge needs what Radin calls "conservatives" as well as "liberals" (Radin, 2006, p. 282). The former put a higher value on preserving the value and consistency of hard-won integrations. The library at Alexandria was burnt, after all, and whole branches of knowledge have been lost in failed transmissions to later generations. Conservatives guard what I have called the **top-down** movement. Liberals, however, point to the fact that novel ideas, which lead continually to the big discoveries, always appear initially unlikely or crazy. What later becomes dogma is too often ridiculed earlier on. So liberals try hard to see that the paradigm does not become a blind catechism. They work to induce **bottom-up** movements.

By and large, rank and file researchers and engineers have been taught to run the successful quantum equations and resolutely ignore the fracas about meaning. The more conservative community's embarrassing secret was that the workings of their tools were every bit as mysterious and poorly understood to them as the effects observed in constellations may be to us. Moderates and liberals who dared to think about it at all split for a long time among three different interpretations of quantum theory (Schumacher, 2009, p. 89-91), and fell back on the idea that its non-local, a-temporal aspects were strictly subatomic (Rosenbaum and Kuttner, 2006, pp. 127-129). Scientifically trained radicals have gone much further and claimed that the new physics validates age-old Eastern philosophical and spiritual teachings (for example, Capra, 1975; Wilson, 1999; Gaswami 2004; Wolf 2007).

Beyond this, popular claims about quantum physics have become both clichéd and wildly metaphorical. We could, for example, assert here that quantum entanglement "proves" what we call **familial entanglement**. Or that sub-atomic coherence is what happens among representatives in a constellation, as they mirror forth a unified family system. And while these are the kind of intriguing hints that can provide fertile directions for research, and many great scientists have followed such leads with great success—it does not help to speak of them on the same terms as empirical results. This rightfully angers honest scientists, and damages the kind of communication we need.

More recently, as a younger generation of physicists takes the reins, some of the polarization is on the wane. Whereas before there were three, now there are ten different interpretations of quantum results (Rosenbaum and Kuttner, 2006, pp. 158-169). And over the last decade, experiments have demonstrated the wave-particle duality in increasingly large molecules, so that it is now more widely accepted that there is no size boundary (Vedral, 2011). Quantum effects may be involved in how the brain works. (Radin, p. 2006, p. 258) And what seems to be a more even-handed look from the physics community at all sides of the situation has appeared in Rosenbaum and Kuttner's **Quantum Enigma—Physics Encounters Consciousness** (2006).

The harder conclusion we **can** draw here is this. For so many reasons, the most basic physical science requires what we are calling the non-local network, and is actively pursuing better understandings of it through both theory and experiment. So if we need to postulate the same thing to explain our constellation effects, it cannot be validly argued that our doing so is somehow any more or less "absurd." We are all in the same boat.

At the same time, we are all employing different terminology. Following Albrecht Maher (2004), constellators speak of the "knowing field." But it does not just "know," it makes things happen as well. Sheldrake speaks of "morphogenetic fields" (Sheldrake, 2009). They remember things and build habits that drive the creation of forms, but we don't know how. Physics talks of the "zero point field," which appears to have vast capacity for information storage and retrieval anytime anywhere. It also makes things happen. Theosophists and occultists have long spoken of the "Akashic Records," which have similarly recorded everything (Wikipedia, 2011a). And Franz Rupert, following Laslo, talks of "the sub-quantum field" (Rupert, 2008, p. 254).

It is hard not to think that all of these are coalescing around the same thing. Whatever else, it is safe to say it has some form of network structure. Hence, my decision to call it simply, "the non-local network." However we might eventually conclude it is "embodied" (and language limps here), the most likely models we can create of it are arrengements of interconnections and hubs capable of conveying information and effects. On analogy to the Internet, I think of it as "the InnerNet."

Conscience, Historical Trauma, and Scientific Reality

Scientific communities engaged in basic research also have group consciences. The same need to belong we see in families influences the kinds of observations, methods, and explanations that are acceptable. Basic research in turn shapes our everyday worldview. We might say then, that not merely what is morally right, but also—for all of us— **what is real is deeply influenced by belonging.** This insight has generated, over the last fifty years, a vast, and often argumentative literature in various disciplines, focused on the "social construction of reality" (for example, Kuhn, 1962; Berger and Luckmann, 1966; Pickering 1984; Hacking, 1999; Tomaschek, 2006; Goldman, 2006; Sparrer, 2007). Regardless of precisely how strong this influence is, there are systemic implications for us here that have not appeared in these arguments.

As pointed out in Part One (Reddy, 2011, pp. 56-57), the conscience of the scientific materialist community is shaped by fairly obvious institutional, financial, and political forces. Researchers need jobs, grants, and the respect of their colleagues. But something deeper is going on as well. Consider again the widespread, largely unconscious use of metaphors of "social regulation" to describe the findings of physical science (Reddy, 2011, p. 59). The universe "goes on **obeying the** quantum-mechanical **laws** of physics," says one leading physicist. Maxwell's equations **govern the behavior** of electricity and magnetism, we hear. Thermodynamics **regulates** the flow of heat.⁴

This is what happens, one might speculate, when the epistemological balance is lost, and **top-down** takes over—when cart of explanation is put before the horse of phenomena. In classical, Newtonian reality, at least, the universe simply does things, and is in no way constrained by the patterns we cobble together to explain it. Perhaps this manner of speaking is merely an outdated survival from the previous Ptolemaic paradigm, which was in fact authority based. Maybe forcing students to use the patterns carefully as they learn to predict events becomes confused with forcing the universe to behave.

Regardless, social regulation metaphors exert influence on what can be experienced. "Don't look for anything different," they imply, "it cannot be

there." And from disciplining the wayward student to crushing dissident observations is unfortunately no great distance. Indeed, criminalization of ideas is splashed, usually in blood-soaked colors, across the pages of human history. In milder, but still recognizable form, destruction of reputations and livelihoods is still perpetrated—regardless of the integrity of their methods—on researchers who document anomalous, sufficiently paradigm-challenging phenomena (McTaggert, 2008, pp 63-69, pp. 39-60). Reality does shape morality.

Arthur C. Clark, the well-known "hard" science fiction writer, has a famous "third law." "Any sufficiently advanced technology," it says, "will be indistinguishable from magic" (Wikipedia, 2011a). Look carefully at magic, it admonishes, because it will be your children's science. This seems obvious, especially these days, does it not? Yet while mainstream scientists apply Clarke's law constantly to their forbearers, the blindness with which so many exempt themselves from it is bewildering. **They** were wrong, goes the refrain, but now **we've** got it right.

Yet when descendents reject their ancestors, we expect entanglements. And it is not hard to point to a large, historical trauma that could be the source of the deeper problem here. Recall that the previous paradigm involved an organic, mystically interconnected, feminine view of Nature. As the pendulum swung towards rationalism, reductionism, and empiricism, the attendant social upheaval involved an onslaught against the old view—and against women in particular who excelled at it. Think of the witch hunts, inquisitions, and more. There is a deep perpetrator-victim dynamic in the evolution of worldviews.

Now, as the findings of quantum physics swing the perspective back towards a neo-organic, quasi mystical interconnectedness, scientific materialists may well be identifying with the perpetrators. They are in a real sense their direct descendents (Merchant, 1990). The difficulty they face in opening their minds to things that seem "psychic" should perhaps also be seen as a hidden entanglement. And we, in turn, coming from the "paranormal" side, should consider whether we are unconsciously loyal to the victims.

Constellating the Intellectual Tribes

Given the profound paradigm-challenging position constellation work finds itself in, we need to both immunize ourselves, on the one hand, and realize on the other that our kind of healing is needed here. When research-based results, or large areas of valid anecdotal experience are condemned as "absurd," or "ridiculous"—this is not part of any search for truth. This is social flag waving, at best, and, at worst, intellectually disguised body-blows. Just as Hellinger has said we need to develop a larger, more universal, ethical conscience, so the world needs to develop a larger, more widely-shared "noetic" conscience. Morality and reality go hand-in-hand.

One thing such a conscience should do is compare absurdities. A physicist these days is lauded for asserting that untold billions of imperceptible parallel

universes branch off every time every person sees or chooses one thing versus another. But constellators are scoffed at for claiming to observe **Induced Systemic Healings** and **Cascading Resolutions** that make people's lives better. Yet, honestly, which is more testable? Which result is more immediately valuable to the human condition? Another physicist can argue that an unobserved cat, whose termination depends on a quantum event, must be simultaneously dead and alive. The behavior of the representative for a symptom, constellators assert, via **effective personification**, can provide valid information about the cure. Isn't the second actually somewhat less difficult to conceive? A more even-handed look at how extreme, how verifiable in principle, and how meaningful to wholesome human affairs various groups' absurdities might be—is long overdue.

The encounter for us is not simply about interesting scientists in researching what we observe. Just as we work to heal larger historical wounds by constellating the traumatic social and political interactions of ethnic and national groups—so these bitter interactions in the quest for human knowledge need to be constellated as well. The social rifts between the intellectual tribes are damaging the larger whole. So-called discussions are too often clashes of unlooked at loyalties. In addition, where possible, we must try to make scientists aware of the impacts of belonging on both ethics and the shape of reality. Those with initially open minds will be able to understand this, see the patterns we see, and begin to move the social pendulum towards a more balanced position.

Parapsychology—the Great Exclusion

So how, then, do humans access the non-local network? In answer to this question, we must consider another large body of research on psychic, or "psi" effects. Doing so risks mainstream ridicule, because, as just explained—in the Western worldview, it is the great, historical, systemic exclusion. Still, there are signs of some shifting. Physicists Rosenbaum and Kuttner point out that polls show over half of American and British people believe in the reality of various "psi" effects. (2006, p.197). They then say,

...since paraphenomena are often linked with the mysteries of quantum mechanics ... competent researchers claiming to display such phenomena should not simply be dismissed out-of-hand. Such out-ofhand dismissal can be seen as arrogant is apparently ineffective. (p 197)

The US National Science Foundation believes that this same majority of people is either stupid or ignorant because it holds to this belief. But its own study shows that 62% of those with more than a high school education subscribe, whereas only 46% of those with less than a high school education do so. So less intelligent, poorly trained people are not the ones doing the believing (Radin 2006, p. 35, and p. 305 footnote 2). Suppose then you were to read, even from a space of healthy skepticism:

- Lynne McTaggert's intelligent if sometimes effusive narratives of researchers drawn into studying the zero point field and the impacts of human intention on events (2007, 2008)
- Rupert Sheldrake's direct studies of psychic phenomena in humans and animals (1999, 2003)
- Or Dean Radin's two masterful and exhaustive discussions of methodologies and outcomes in his own and a vast body of research on psi effects (2006, 2009)

My bet is any truly honest skepticism (as opposed to social loyalties and hidden entanglements) would be hard put to survive. Literally thousands of studies have been carried out by disconnected researchers over decades, challenged mercilessly for their methods, improved, and still ended up showing results that are wildly improbable in terms of mere chance. The odds against chance here are often far higher than those used to show that a drug is "highly effective"—including such commonplace staples as aspirin no less (McTaggert, 2008, p. 117).

Then to show that they are not unrepresentative flukes, meta-analyses have compiled the results of tens and hundreds of such studies. These have also been challenged mercilessly in terms of three major forms of bias, improved upon, and given a clean bill of health (Radin, 2006, p. 102 and following). Radin (2006) argues convincingly that precognition, retro-cognition, remote viewing, and the sense of being stared at are proven in laboratory conditions. He analyzes in detail the arguments of a variety of skeptics. From any kind of openminded position, one is left wondering if perhaps the following quote contains a grain of truth:

When a belief is widely held in the face of overwhelming evidence to the contrary, we call it superstition. By that criterion, the most egregious superstition of modern times, perhaps of all time, is the "scientific" belief in the non-existence of psi. (Radin, 2006, p. 35, quoting Tomas Ettter, referenced in footnote 1 p. 305)

Conclusion—if Consciousness Comes First

That said, none of this is to suggest that, as a professional community, we should ourselves engage in finger pointing. Instead, on the intellectual level, we need to understand and emphasize the commonality between what we do and what scientists do. Our methods are seriously less formal. We have ventured deeper in many ways than physics, or even psychology, into both human complexity and the still bewildering non-local, a-temporal landscape. But we are on a similar, ultimately experimental quest for practical knowledge. We share the same **top-down**, **bottom-up** tensions that are so evident in all perception, cognition, and every scientific field. And, as I hope **Part Two** has made clear to you, what scientists need to provide explanations on their levels is much the same thing we need to better understand ours.

But beyond that, we are a community of healers. I want to emphasize once again that the kind of healing we do may be crucial in these areas. It relates directly to those important underlying sources of damaging intellectual dissension: namely, social bonding, overly narrow professional consciences, and inherited historical trauma. So our mission here is not simply to interest more scientists in researching constellation work. It is also to promote wider understanding of these underlying sources among the intellectual tribes. It is to use the tools we already have to begin releasing the entanglements that stand currently in the way of a truly communal search for truth.

But let's reframe that phrase "search for truth"—because it assumes the materialistic perspective. Suppose our evolving Western worldview does turn in the direction of placing consciousness first, and so that material reality arises from it, and not vice versa. This will likely involve a profound reorientation. Society may have to acknowledge that, based on the influences of family, language, and tribal affiliations, individual human consciousnesses construct social and physical realities that overlap only partially with those of other people. If that is the case, then "truth," objectivity, and fairness in personal and political interactions are not given. They come to exist only if the hard work of cooperating and communicating succeeds in making those semi-private realities overlap more rather than less. In my view, systemic constellations could make a large contribution to such an effort.

As we look now towards **Part Three** of the series, much of the groundwork is laid. Hopefully, it is clear that scientists, in their way, are encountering non-local, atemporal phenomena just as we are. What we observe, though harder to study formally, is no more or less "impossible" than what they observe. We turn then, in the next issue, to the local network and closer discussion of the five constellation effects. **Part Three** is subtitled: "Epigenetics, Biomagnetism, and the Resonant Workshop."

References

Berger, P. L., & Luckmann, T. (1966). The social construction of reality; a treatise in the sociology of knowledge,. Garden City, NY: Doubleday.

Capra, F. (1975). The Tao of Physics: an Exploration of the Parallels between Modern Physics and Eastern Mysticism. New York: Bantam.

Goldman, S. L. (2006). Science wars. what scientists know and how they know it : course guidebook. Chantilly, VA: Teaching.

Goswami, A. (2004). The quantum doctor: a physicist's guide to health and healing. Charlottesville, VA: Hampton Roads Pub.

Hacking, I. (1999). The social construction of what? Cambridge (Massachusetts): Harvard University Press.

Kaku, M. (2005). Parallel worlds: a journey through creation, higher dimensions, and the future of the cosmos. New York: Anchor Books.

Kuhn, T. S. (1962). The structure of scientific revolutions. Chicago: University of Chicago Press.

Maher, Albrecht. (2004) "Family Constellations –Failure, Evil, and Guilt as Sources for Loving Dedication and Compassionate Strength,"

http://www.collectivewisdominitiative.org/papers/mahr_constellations.htm

McTaggart, L. (2007). The intention experiment: using your thoughts to change your life and the world (Updated ed.). New York: Free Press.

McTaggart, L. (2008). The field: the quest for the secret force of the universe. New York, NY: HarperCollins.

Merchant, C. (1990). The death of nature: women, ecology, and the scientific revolution. New York: HarperSanFrancisco.

Pickering, A. (1984). Constructing quarks: a sociological history of particle physics. Chicago: University of Chicago Press.

Radin, D. I. (2006). Entangled minds: extrasensory experiences in a quantum reality. New York: Paraview Pocket Books.

Radin, D. I. (2009). The conscious universe: the scientific truth of psychic phenomena. New York, NY: HarperOne.

Reddy, M. (2002). The Conduit Metaphor--A Case of Frame Conflict in our Language about Language. In *Metaphor and thought*. Cambridge: Cambridge University Press.

Reddy, M. (2011). Constellations and the Evolution of Worldviews--Part One: Paradigm Shift. The Knowing Field: International Constellations Journal, (18), 56-63.

Rosenblum, B., & Kuttner, F. (2006). Quantum enigma: physics encounters consciousness. Oxford: Oxford University Press.

Ruppert, F. (2008). Trauma, bonding & family constellations understanding and healing injuries of the soul. Frome, Somerset: Green Balloon Publ.

Schumacher, B. (2009). Quantum Mechanics: The Physics of the Microscopic World. Chantilly, VA: The Teaching Company.

Schumacher, B. (2010). *Physics beyond the Edge*. Chantilly: The Teaching Company.

Sheldrake, R. (1999). Dogs that know when their owners are coming home: and other unexplained powers of animals. New York: Crown.

Sheldrake, R. (2003). The sense of being stared at: and other aspects of the extended mind. New York: Crown.

Sheldrake, R., & Sheldrake, R. (2009). Morphic resonance: the nature of formative causation. Rochester, VT: Park Street Press.

Sparrer, I. (2007). Miracle, solution and system: solution-focused systemic structural constellations for therapy and organisational change. Cheltenham: Solutions Books.

Talbot, M. (1992). The holographic universe. [New York]: HarperPerennial.

Tomaschek, N. (2006). Systemic coaching: a target oriented approach to consulting. Heidelberg: Carl-Auer-Verl.

Vedral, V. (2011). Living in a Quantum World. Scientific American, June, 38-43.

Whittle, Ph.D., M. (2011). Cosmology: The History and Nature of Our Universe. The Teaching Company, LLC.

Wikipedia, the Free Encyclopedia. (2011a). Akashic records. (n.d.). Retrieved October 07, 2011, from <u>http://en.wikipedia.org/wiki/Akashic_records</u>

Wikipedia, the Free Encyclopedia. (2011b). Clarke's Three Laws. (n.d.). Retrieved October 07, 2011, from http://en.wikipedia.org/wiki/Akashic_records

Wilson, R. A. (1999). Quantum psychology: how brain software programs you and your world. Tempe Ariz.: New Falcon.

Wolf, F. A. (2007). The yoga of time travel: how the mind can defeat time. New Delhi: Wisdom Tree.

Wolfson, R. (2000). Einstein's relativity and the quantum revolution. modern physics for non-scientists. Chantilly, VA: Teaching.

Biography

Michael Reddy, Ph.D., CPC, is a constellator, certified wellness coach, and author based in Philadelphia, USA. Trained by native and mixed-blood elders, he has practiced a form cross-cultural shamanic spirituality and healing for over twenty years. His activities in the business world include organizational development, system design, and technology management--both on a consulting basis, and as a chief technical officer. A former academic, he holds a doctorate from the University of Chicago in cognitive science, and served as assistant professor at Columbia University for six years. His research on conceptual metaphors in human language was widely recognized as groundbreaking (see Wikipedia, "conduit metaphor"). At the recent 2011 US Systemic Constellations Conference, he was one of the panelists teaching the full day course on "Constellations and Coaching." See <u>www.reddyworks.com</u>.

Acknowledgements

Thanks to Jenifer Altman, Dan Booth Cohen, Barbara Morgan, who worked with me on **Part Two**, and all those who helped with earlier drafts of this series, especially Dan Booth Cohen, Chris Walsh, and Jane Peterson.

¹ Eventually, we would have to consider the physical families of the representatives as well. And there are at least three other constellation effects we might bring into the picture. But these involves a deeper level of analysis, and must wait for another venue.

² Ordinary language is severely challenged in speaking about non-local, a-temporal effects. To even say "outside" of time and space is to invoke a spatial metaphor. So I am **not** using in this paragraph terms like "transmit" or "receive" information—because they so strongly imply movement across space. The phrase "create access to information" is my best effort keep the language free from contradictory metaphors. I had hoped to cover more of this issue here, but could not.

³ The reference list contains a number of grounded, yet non-mathematical and accessible sources should you wish to pursue these developments further (see Kaku, 2005; Rosenbaum and Kuttner, 2006; Schumacher, 2009 and 2010; Whittle, 2011; and Wolfson 2000). Those published by The Teaching Company are excellent college level courses on DVD with accompanying books, taught by celebrated professors. My references in this case are to page numbers in the books.

⁴ Though not as pervasive, this is similar to the conduit metaphor's misconception of the workings of verbal communication (see Reddy, Wikipedia, "Conduit Metaphor", or read the original monograph on my website at http://www.reddyworks.com/reddy-writes/the-conduit-metaphor). Use of social regulation terms in describing patterns of Nature involves underlying conceptual metaphor that is built in to English, and presumably other Western languages. It is quite hard to speak in this area without using it.