# TRANSPERSONAL PSYCHOLOGY, SCIENCE, AND THE SUPERNATURAL

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ABSTRACT: This article critically discusses the scientific status of transpersonal psychology and its relation to so-called supernatural claims. In particular, analysis focuses on Friedman's (2002, 2013a) proposed division of labor between a "scientific" transpersonal psychology and "nonscientific" transpersonal studies. This paper demonstrates that despite Friedman's aim to detach transpersonal psychology from any particular metaphysical worldview, turning the field into a modern scientific discipline effectively binds transpersonal psychology to a naturalistic metaphysical worldview that is hostile to most spiritual knowledge claims. After identifying several problems with Friedman's account of science and neo-Kantian skepticism about "supernatural" factors in spiritual events, this paper introduces the perspective of a participatory metaphysical pluralism and considers the challenge of shared spiritual visions for scientific naturalism. Finally, a participatory research program is outlined that bridges the naturalistic/supernaturalistic split by embracing a more liberal or open naturalism—one that is receptive to both the ontological integrity of spiritual referents and the plausibility of subtle dimensions of reality.

KEYWORDS: transpersonal psychology, science, naturalism, reductionism, supernatural, participatory, neo-Kantianism.

Should transpersonal psychology be a scientific discipline? Do transpersonal psychologists need to pledge to the exclusive use of empirical methods in their research and scholarship? A number of contemporary transpersonal scholars have so argued (see Daniels, 2001, 2005; Friedman, 2002, 2013a; MacDonald, 2013). Although with different emphases, they propose that transpersonal psychology should focus on the scientific study of the naturalistic (i.e., physical and psychological) aspects of transpersonal phenomena, staying away from not only supernatural or metaphysical considerations, but also nonempirical approaches such as hermeneutics or contemplative methodologies. Their explicit aim is to free transpersonal psychology from religious ideologies, secure the field's metaphysical neutrality, and thus enhance its social and academic legitimacy as a scientific discipline.

While I argue against the pursuit of these aims in this article—and in particular against Friedman (2002, 2013a) as their strongest advocate—I also recognize the value of a scientific approach. First, although I have elsewhere critiqued the "empiricist colonization of spirituality" (i.e., the import of empiricist standards such as falsifiability to spiritual inquiry; see Ferrer, 1998, 2002), I also think

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that transpersonal psychology would benefit from more scientific studies. To discern the transformative outcomes, neurobiological correlates, and phenomenology of transpersonal events, among other possible empirical findings, is hugely important; quantitative and qualitative approaches should be regarded as equally vital for the field (see Anderson & Braud, 2011, 2013). Second, I agree with Friedman (2002, 2013a) that transpersonal psychology should neither become a religion nor be exclusively tied to any particular spiritual tradition or metaphysical worldview. With this goal in mind, some of my past works sought to expel spiritual ideologies underlying transpersonal models through a participatory framework that does not privilege any spiritual tradition or orientation over others on objectivist, ontological, or metaphysical grounds (i.e., saying that theism, monism, or nondualism corresponds to the nature of ultimate reality). Those writings also offered criteria for making qualitative distinctions regarding spiritual matters, based on pragmatic and transformational grounds such as selflessness, embodied integration, and ecosocial-political justice (Ferrer, 2002, 2008a, 2011a, 2011b). Third, although accounts of the scientific method from the transpersonal defenders of science more closely resemble what one would find in a science textbook than the activities of a practicing scientist, these authors are not naïve scientists. Rather, these scholars present a philosophically informed scientific approach that properly acknowledges science as but one path to knowledge, the provisional nature of scientific products, and the hermeneutic dimension of science (i.e., data are theory laden; Friedman, 2002, 2013a; MacDonald, 2013).

In this article, however, I show that the scientific approach can be—and indeed has been—taken too far. I first argue that these scholars (e.g., Daniels, 2001, 2005; Friedman, 2002, 2013a; MacDonald, 2013) underestimate how the powerful ways in which modern science is embedded in a naturalistic metaphysics betray their goal to free the discipline from fidelity to any metaphysical worldview. Then, after identifying serious problems with these authors' adherence to a neo-Kantian epistemology and associated metaphysical agnosticism, I show the residual scientism afflicting their proposals for a scientific transpersonal psychology. Next, I present the critical metaphysical pluralism of the participatory approach and discuss the challenge of shared spiritual visions for scientific naturalism. Finally, as a possible direction to relax the field's metaphysical tensions, I offer an example of a participatory research program that bridges the modern dichotomy between naturalism and supernaturalism (though I later argue against the need for either term, they are appropriate when discussing this so-called divide). I conclude by arguing that although transpersonal psychology should encourage scientific studies, the field should not be defined or limited by its allegiance to any single inquiry approach, epistemology, or metaphysical worldview.

#### SCIENCE, NATURALISM, AND METAPHYSICAL AGNOSTICISM

In two important manifestos, Friedman (2002, 2013a) proposed to restrict the term *psychology* to refer to the scientific study of transpersonal phenomena and to use the broader category *transpersonal studies* for nonempirical approaches.<sup>2</sup>

Friedman's main motivation appears to be detaching transpersonal psychology from specific metaphysical worldviews, such as those espoused by religious traditions. Because metaphysical statements cannot be empirically tested, Friedman argued, a scientific transpersonal psychology should remain agnostic about metaphysical and supernatural claims and concentrate instead on the naturalistic study of the physical and the psychological (cf. McDonald, 2013).

Leaving aside the circularity of this argument, a more serious issue emerges when considering that, as generally understood and practiced in modern times,<sup>3</sup> science entails a naturalistic metaphysics associated with an ontological materialism and reductionism that is antithetical to "supernatural" worldviews (see, e.g., de Caro & MacArthur, 2000, 2004a; Dupré, 1993; Ellis, 2009; Mahner, 2012). In other words, far from being metaphysically neutral, modern science endorses the naturalistic "view that all that exists is our lawful spatiotemporal world" (Mahner, 2012, p. 1437). Metaphysical naturalism, Mahner (2012) added, should be considered essentially constitutive of science—"a tacit metaphysical supposition of science, an ontological postulate" (p. 1438) without which science would no longer be science (cf. Schafersman, 1997).

While Friedman (2002, 2013a) has been silent on this subject, MacDonald (2013) duly conceded that naturalistic science, like religion, is based on unverifiable metaphysical assumptions. As Dupré (1993) pointed out, "It is now widely understood that science cannot progress without powerful assumptions about the world it is trying to investigate, without, that is to say, a prior metaphysics" (p. 1). One of science's main metaphysical assumptions, MacDonald continued, is the commitment to an "ontological materialism or naturalism" (p. 316) that favors reductionist explanations, for example, seeking to explain spirituality through neurobiological mechanisms.<sup>4</sup> MacDonald understands that this commitment has the same assumptive epistemological status as what he calls a "transcendental reductionism" that views "transpersonal phenomena as ontologically real and of a source and quality that is not reducible to material processes" (p. 318). However, he unwarrantedly concluded that such a predicament, instead of encouraging metaphysical pluralism or neutrality, renders "the criticism of reductionism...as holding little value in advancing transpersonal science" (p. 318). The upshot of this move is that any talk about transcendent or supernatural realities should be "viewed in purely experiential terms" (p. 321) with "anything that is available to human experience [being] a legitimate focus of scientific study" (p. 321). Although such radical empiricism (after James, 1912/ 2002) is salutary, experientialism—the reduction of spiritual phenomena to human experience—generates a plethora of problems for transpersonal psychology. As I have examined those problems elsewhere (Ferrer, 2002), the present discussion focuses on other issues.

In *The Empirical Stance* (2002), the philosopher of science van Fraassen showed that the common association of scientific empiricism with naturalistic and materialistic metaphysical theories is not only unwarranted, but also misleading and ideological. Essentially, van Fraassen argued, whenever

empiricism is linked to any metaphysical or philosophical position telling what the world is like, one cannot avoid falling into ideological false consciousness: "There is no factual thesis itself invulnerable to empiricist critique and simultaneously the basis for the empiricist critique of metaphysics" (p. 46). To be consistent, van Fraassen maintained, empiricism should be regarded as a methodological *stance*—that is, an attitude, orientation, or approach free from necessary specific beliefs or theses about reality and thus potentially open to both secular and religious worldviews. <sup>5</sup> His concluding passage merits reproduction at length:

Each of the 'isms' I mention here [i.e., materialism, naturalism, secularism] has at some point appropriated for itself all the credit for the advances of science, in order to claim its liberating power and moral authority. Each has at some point intimated that it consists in nothing more than full-fledged acceptance of what science tells us about the world. Coupled with this, a little paradoxical, comes the insistence that science would die if it weren't for the scientists' conscious or unconscious adherence to this philosophical position. All of this is false; in fact, it is in philosophy that we see the most glaring examples of false consciousness and they occur precisely at this point. (pp. 194–195)

Similarly, Dupré (2004) explained how the naturalistic opposition to supernatural agents or explanations often degenerates into a physicalism endorsing a monistic metaphysical worldview that is in conflict with empiricism (i.e., monistic in the sense that everything in existence consists of and can be explained in terms of a single substance: physical matter).<sup>6</sup> Since the completeness of physics is not empirically warranted, Dupré added, such monism is a supernatural myth at odds with empiricist standards. The problems with physicalism and materialism as metaphysical doctrines are exacerbated by the many failures of reductionism in biology, genetics, ecology, and psychology (Dupré, 1993). In addition, important contemporary trends in complexity theory, nonlinear science, and neuroscience not only postulate diverse forms of downward causation but also challenge the epistemic superiority of reductionist explanations (e.g., Andersen, Emmeche, Finnemann, & Christiansen, 2000; Beauregard, 2007). In this context, transpersonal psychologists may be especially interested in Fingelkurts and Fingelkurts's (2009) thorough rebuttal of the 15 most frequent arguments used to reduce religious experience to neurobiology. "The only conclusion from observed neuroscientific studies," they summarized, "is that religious experience is reflected in brain activity and that the brain somehow mediates some aspects of religiosity" (p. 312). As the nonlinear scientist Scott (2004) wrote, "Reductionism is not a conclusion of science but a belief of many scientists" (p. 66).

Other scholars support Dupré's (1993, 2004) concerns and highlight the problems raised by this naturalistic metaphysical worldview for religion. Habermas (2008), for example, wrote the following: "The ontologization of natural scientific knowledge into a naturalistic worldview reduced to 'hard facts' is not science but bad metaphysics" (p. 207). He added that with its naturalistic worldview, "scientism enters into a genuine relation of competition

with religious doctrine" (p. 245). This naturalism becomes a "quasi-religion" (Plantinga, 2011, p. x) in its answering (even if in the negative) questions concerning the existence of God or the intrinsic meaning of life. Critiquing the "religious" temperament of naturalistic empiricism, Irwin (2008) pointed out:

Those who fail to recognize the truth of this empiricism are condemned to ignorance; "salvation" lies in embracing the materialist belief that all religious causality is reducible to biology, evolutionary psychology, and/or sociocultural conditioning. (pp. 197–198)

Metaphysical naturalism further assumes "that when religious people claim to have had supernatural experiences that defy rational explanations they are mistaken in some way" (McCutcheon, 1999, p. 127). The naturalistic paradigm, in Byrne's (1999) words, "far from being a neutral description...assumes the falsity and/or irrationality of religious thought and practice" (p. 251).

It is also important to consider that, as Bilgrami (2000) explained, science's adoption (in the 17th century) of a naturalist metaphysics that voids the natural world of spiritual or divine presence was not, contra widespread belief, a scientific necessity—rather, it was historically motivated by powerful political and economic factors (see also Nagel, 2012).<sup>7</sup> To be sure, as Tarnas (1991) pointed out, the disenchantment of the natural world was overdetermined by a plethora of philosophical, social, political, and psychological factors. Reflecting this complexity, powerful political alliances between key ideologues of the Royal Society of London and commercial interests, intersecting with strictly scientific considerations, seem to have played a key role in the triumph of a naturalistic worldview (cf. Kubrin, 1980). After all, Bilgrami wrote, "from an anima mundi, one could not simply proceed to take at whim and will" (p. 42), but a disenchanted world devoid of value, purpose, or divinity could be easily turned into "natural resources" to be recklessly exploited.

Beyond its ideological underpinnings, the systematic deflationary bracketing of supernatural claims can have a fatal consequence for transpersonal research, effectively blinding researchers from the actual presence of supernatural (i.e., standing outside of the currently known or accepted natural world) agents or forces at play in the shaping of spiritual and transpersonal events. After all, as Mahner (2012) stressed, the "no-supernatural principle" (p. 1442) is not only a methodological but also a metaphysical supposition of modern science. Even in philosophy, all varieties of naturalism are joined in their rejection of supernatural agents such as gods, angels, or spirits (see de Caro & MacArthur, 2000, 2004a).8

However, as Northcote (2004) persuasively argued, the methodological suspension of the validity of supernormal claims (e.g., about metaphysical entities or levels of reality), far from warranting objectivism or scholarly neutrality in the study of religion, may actually constitute a bias against "the possibility that people's thinking and behaviour are indeed based on various supernormal forces ... a bracketing approach will falsely attribute mundane sociological [or biological] explanations to behaviour that is in actuality shaped by supernatural forces" (p. 89). Accordingly, Northcote issued a call for

dialogue between Western naturalistic and alternative perspectives in the appraisal of supernormal claims. Wallace (2000) made a similar point regarding scientific materialism: "If there are any nonphysical influences on physical events, unquestioning acceptance of this belief [in the causally closed nature of the physical world] will ensure that those influences will not be recognized" (p. 25). Thus, I argue that unless one subscribes ideologically to a naturalistic metaphysics, it may be prudent—and heuristically fertile—not to reject a priori the possibility of effective causation from the various metaphysical sources and/or subtle psychic influences described by religious and spiritual practitioners.<sup>9</sup>

In light of modern science's metaphysical commitments, it is evident that Friedman's (2002, 2013a) proposal fails to meet its own standards. Scientific naturalism is not only *thoroughly* metaphysical, but also arguably shaped by economic interests perpetuating an eco-pernicious, disenchanted worldview that imposes methodological blinders on transpersonal researchers. As the famous dictum goes, "epistemology drives metaphysics," and so, whether in science or transpersonal psychology, metaphysical skepticism is usually rooted in an allegiance to neo-Kantian epistemology, to which I now turn.

#### ON TRANSPERSONAL NEO-KANTIANISM

Both Friedman (2002, 2013a) and MacDonald (2013) advised that transpersonal psychology should remain metaphysically agnostic toward any ontological reality beyond the physical and psychological, and simply focus on the scientific study of human experience. This apparently cautious stance, however, is dependent on the validity of neo-Kantian frameworks that bracket the existence of supernatural and metaphysical sources of spiritual and transpersonal phenomena. Although Kant's actual views on this matter are far from clear (Perovich, 1990), neo-Kantian frameworks assume that innate or deeply seated epistemic constraints in human cognition render impossible and therefore illicit any knowledge claim about metaphysical realities. In other words, metaphysical (noumenal) worlds *may* exist, but the only thing accessible is the human situated phenomenal awareness of them.

Friedman (2002) is explicit about his commitment to neo-Kantian dualism. After stating that "science can directly study phenomena but not underlying noumena" (p. 182), he restricted transpersonal psychology to the scientific study of "transpersonal phenomena"—removing any talk about possible "transcendent noumena" from its scope (p. 182). A scientific transpersonal psychology, then, should be skeptical and agnostic about the existence of any transcendent referent and stick with the study of human experience. By "transcendent," however, Friedman means different things in different essays. Initially, he reified "the transcendent" into a single ineffable and transcategorical mystical ultimate: "I consider it [the transcendent] to be the ultimate holistic concept that can only be experienced, if at all, in a direct and unmediated fashion unhampered by any specific limitation" (p. 182). Later he reformulated this notion as "anything that is supernatural and metaphysical

(e.g., that might be outside of space and time)" (2013a, p. 307). In both accounts, Friedman argued, transpersonal psychology should remain metaphysically agnostic because the transcendent is transconceptual, that is, "beyond categories" (2013a, p. 183).

One of the problems with this account is that there is no such thing as "the transcendent" in the singular, but instead a rich variety of spiritual ultimates that, while some are indeed said to be transconceptual, can nonetheless be theorized in numerous ways—as hundreds of religious texts attest. In addition, many allegedly supernatural spiritual phenomena are thoroughly conceptual and so they escape Friedman's (2002, 2013) demarcation criterion concerning scientific transpersonal psychology's scope of study. Consider, for example, spiritual visions such as Ezekiel's Divine Chariot, Hildegard's visionary experience of the Trinity, or Black Elk's Great Vision, as well as spiritual realms such as Buddha lands, the Heavenly Halls of Merkavah mysticism, and the many subtle worlds posited by Western esoteric schools or shamanic traditions. These realms and visionary referents are far from being formless or "beyond categories" and are claimed to exist beyond physical and psychological domains. While Friedman's portrayal of the transcendent may be consistent with certain apophatic mysticisms (Sells, 1994), it is by no means inclusive of the variety of ways in which supernatural realities have been enacted, understood, and described.

In addition, scientific transpersonal psychology cannot study the transcendent, Friedman (2013a) claimed, because "any direct, nonmediated knowing would not be conceptual but another ilk outside of the parameters of science" (p. 306). Direct knowledge, however, can be conceptualized. Right this moment I am having a direct experience of the hot chocolate I am drinking, but this does not prevent me from potentially describing it (e.g., as warm, spicy, bittersweet) and thus study it. To be sure, such experience, like transcendent ones, has mediated elements (e.g., cultural predispositions), but they are rather insignificant compared to its direct qualities (i.e., no cultural influence will make my hot chocolate taste like cold orange juice; cf. King, 1988). As Wilber (1995) put it, "I find myself in *immediate* experience of *mediated* worlds" (p. 601).

The entire mediated-unmediated dichotomy, however, is ultimately parasitic of neo-Kantian epistemology: On the one hand, there is an unfathomable noumenon or "thing-in-itself," and, on the other, a variety of mediating factors or mechanisms through which such reality becomes phenomenally accessible. These factors (e.g., deep structures, paradigms, conceptual frameworks, languages, cognitive schemes, and neural-physiological mechanisms), so the Kantian story goes, not only operate at conscious and unconscious levels of awareness, but also limit and shape in fundamental ways what can be possibly known about the world. Central to the notion of mediation is the claim that it is *only* through these constructions and mechanisms that human beings can make intelligible the raw input of an otherwise inscrutable reality.

As discussed elsewhere (Ferrer, 2002), after disposing of the Kantian two-worlds metaphysical doctrine and related dogmas such as the scheme-content dualism (Davidson, 1984), these so-called mediating factors—far from being limiting or

distorting—can be seen as the vehicles through which reality or being self-manifests through the human (cf. Schillbrack, 2014). Mediation is thus transformed from an obstacle into *the very means that enable human beings to directly participate in the self-disclosure of the world.* Tarnas (1991) gets to the heart of the matter:

All human knowledge of the world is in some sense determined by subjective principles [mediating factors]; but instead of considering these principles as belonging ultimately to the separate human subject, and therefore not grounded in the world independently of human cognition, this participatory conception held that these subjective principles are in fact an expression of the world's own being, and that the human mind is ultimately the organ of the world's own process of self-revelation. (pp. 433–434)

Friedman (2002) has also overlooked the religious implications of his transpersonal neo-Kantianism. After his rightful plea against the use of transpersonal psychology "to promulgate any specific religious or spiritual folks traditions" (p. 176; cf. Friedman, 2009), he wrote that his claim regarding the unknowability of transcendent noumena is "congruent with...the Judaic emphasis on the essential mystery of God's unknowability and the Taoist emphasis in the Tao Te Ching that those who speak about the Tao do not know of what they speak" (p. 182). However, many (arguably most) mystical traditions—from Advaita Vedanta to Raja Yoga to most Buddhist schools to many forms of Christian mysticism—do defend the possibility of directly knowing such ultimate referent or reality (cf. King, 1999). Incidentally, Friedman's inclusion of Taoism as supporting his view is dubious since claims for immediate dynamic attunement to the Tao in this tradition are well known (e.g., Kohn, 2001).

My aim here is not to argue for any particular epistemic viewpoint but merely to show the inescapability of metaphysical (and perhaps even religious) commitments in human inquiry, whether scientific or not. Actually, since the impossibility of directly knowing God is especially central to Judaism (as *Ain Sof* or primordial divinity), Gnosticism, and certain Christian and Muslim apophatic mysticisms, one could charge Friedman's (2002) proposal with inadvertently accomplishing exactly what he seeks (and implicitly claims) to avoid: He confines transpersonal research within the epistemological and metaphysical strictures of particular Western religious traditions. <sup>13</sup>

In sum, the legitimacy of metaphysical agnosticism and skepticism is contingent on the validity of a neo-Kantian dualistic metaphysics, which further undermines the professed metaphysical neutrality of transpersonal scientism. In effect, Friedman's (2002) account creates an implicit hierarchy not only between particular Western traditions (which got it right) and most other religious traditions (which got it wrong), but also, as the next section stresses, between Western and non-Western epistemic frameworks.

#### Western Ethnocentrism and Epistemic Colonialism

Neo-Kantian skepticism is not only empirically unwarranted, but also requires the ethnocentric dismissal of the cognitive claims of most of the world spiritual practitioners. This is evident in the way it explicitly or implicitly dismisses supernatural claims made by spiritual practitioners as pre-critical, ingenuous, dogmatic, or even primitive and superstitious. In the context of religious studies, Irwin (2008) caustically wrote about such an attitude:

Causality attributed to nonempirical sources, neither measurable nor scientifically testable, must be relegated to the dust bins of history as quaint misbeliefs held by "folk" believers, whose poor intuitions have led them astray into the murky subterranean depths of the unconscious, social repression, and the denied stirrings of primal needs and desires. (p. 198)

In other words, since the world's Indigenous and contemplative traditions have not undergone the Kantian revolution of the modern West, their cognitive claims should not be taken seriously. Instead, traditional supernatural claims should be taken symbolically, critically filtered through Western epistemologies, or translated into Western scientific or academic categories.

Consider how Friedman's (2002, 20013a) neo-Kantianism led him to believe that noumenal or ultimate reality is unavoidably inaccessible to human cognition. This claim contradicts most contemplative and Indigenous epistemic frameworks, which explicitly assert such access (e.g., Forman, 1989; King, 1999; Klein, 1986; Irwin, 1994). The problem here is that assuming neo-Kantianism is right elevates a highly questionable Western epistemology (see e.g., Davidson, 1984; Schillbrack, 2014; Schrader, 1967; Tarnas, 1991) as superior to all other non-Western epistemic frameworks.

Of course, the reevaluation of non-Western emic frameworks in contemporary debates does not settle the contested issues (Ferrer & Sherman, 2008b); rather, it simply but crucially highlights the fact that Western epistemologies may not be the last arbiters in the assessment of religious knowledge claims, and in particular of those emerging from long-term spiritual practice or ritual. As King (1999) stated:

My point is not that Western scholars should necessarily accept the emic [epistemological] perspectives over which they are claiming the authority to speak, but rather that they at least entertain the possibility that such perspectives are a legitimate stance to adopt and engage them in constructive debate. (p. 183)

This approach entails more than merely taking emic claims as inspirations for "real" scientific research (which Friedman accepts)—one must also consider the relevance of emic epistemic frameworks to alternatively understand ways of knowing and assess knowledge claims.

Friedman (2013a) sees value in adopting emic perspectives in cross-cultural encounters but only to a point. Since such perspectives are based on supernatural assumptions, he considered such an approach "potentially dangerous for those who desire to maintain their so-called scientific objectivity through keeping an etic perspective. However, having an emic perspective can

be useful, if the etic perspective can also be kept intact" (p. 303). In other words, non-Western standpoints are to be appreciated insofar as they do not challenge Western frameworks and their supposedly "objective" standards. <sup>14</sup> Friedman's (2013a) account of transpersonal psychology's mission gives the show away. He stated: "Transpersonal psychology can be seen as an attempt to replace traditional spiritual and folk psychological worldviews with perspectives congruent with those of modern science, that can develop scientifically through empirical research" (p. 310; emphasis added). Emic perspectives and categories, that is, should be not only translated but also ultimately replaced by Western scientific ones. <sup>15</sup>

In counterpoint to Friedman's (2013a) suggestion, an increasing number of anthropologists, scholars of religion, and transpersonal thinkers refuse the translation of religious terms into Western scientific concepts. In addition to Stoller's (Stoller & Olkes, 1987) participatory rejection of ethnographic realism in anthropology, many contemporary scholars endorse the application of emic categories in the study of religion and spirituality. For example, Saler (2000) suggested that scholarship could benefit from the use of folk categories (e.g., the Hindu concept of *dharma*) as tools of anthropological analysis (cf. Lancaster, 2013). Transpersonal scholar Rothberg (2000) made an even stronger case in the context of spiritual inquiry:

To interpret spiritual approaches through categories like "data," "evidence," "verification," "method," "confirmation," and "intersubjectivity" may be to enthrone these categories as somehow the hallmarks of knowledge... But might not a profound encounter with practices of spiritual inquiry lead to considering carefully the meaning of other comparable categories (e.g., *dhyana*, *vichara*, *theoria*, *gnosis*, or *contemplatio*) and perhaps to developing understandings of inquiry in which such spiritual categories are primary or central when we speak of knowledge? To assume that the categories of current western [sic] epistemology are adequate for interpreting spiritual approaches is to prejudge the results of such an encounter, which might well lead to significant changes in these categories. (pp. 175–176)

These and others scholars are persuasively arguing that importing Western epistemic categories to analyze and account for the validity of knowledge claims from all cultures, ways of knowing, and domains of reality is highly questionable (cf. Roth, 2008). Most religious and spiritual endeavors, I should add, are aimed not so much at describing or explaining human nature and the world, but at engaging and transforming them in creative and participatory ways (see, e.g., Apffel-Marglin, 2011; Ferrer & Sherman, 2008a; Hollenback, 1996), and may therefore call for different validity standards than those emerging from the rationalistic study of the natural world.

In closing this section, a number of questions arise: Might not the very goals and assumptions of Western research programs be revised in the encounter with non-Western understandings? Should not a truly postcolonial scholarship be open to be transformed *at depth* by transcultural methodological

interactions? Can scholars dance between etic and emic, insider and outsider stances, in their approach to spiritual phenomena, particularly those involving supernatural or metaphysical claims? Paraphrasing Kripal (2006), I propose that it is as important to let go of the pride of the insider and embrace the "gnosis of the outsider" as it is to let go of the pride of the outsider and embrace the "gnosis of the insider." To this end, transpersonal scholarship may need to navigate successfully between the Scylla of uncritical acceptance of all emic claims ("romanticism and going native") and the Charybdis of assuming Western epistemological superiority ("colonialism and epistemic violence").

I suggest that transpersonal psychology will be *fully* free from epistemic colonialism only when it stops taking for granted Western frameworks such as neo-Kantianism or scientific empiricism as absolutely privileged in the study of the world's traditions (even if science can be considered a superior approach to study particular empirical aspects of religion, e.g., brain activity and cognitive capacities functioning; see Lancaster, 2004, 2013). Postcolonial transpersonal approaches should not be motivated by politically or spiritually correct attitudes (often rooted in cultural guilt) but by a blend of epistemological boldness and humility that embraces the potential value of different epistemic frameworks, while concurrently acknowledging the limits of the analytic rationality cultivated in the modern West. The next section elaborates on this critical point.

### Neo-Kantianism, Disembodiment, and Existential Alienation

Thinkers as diverse as Bordo (1987), Leder (1990), Nagatomo (1992), Varela, Thompson, and Rosch (1991), and Yasuo (1987) have suggested that the process of increasing dissociation between mental and somatic worlds, which characterized important strains of the modern Western trajectory, was an important source of both the postulation and the success of the Cartesian mind-body doctrine. The overcoming of Cartesian dualism, therefore, may not be so much a philosophical but a practical, existential, and transformative task.

In a similar vein, I propose that the Kantian two-worlds doctrine (and its associated epistemic skepticism) is largely dependent on the estrangement of the human mind from an embodied apprehension of reality. As contemporary cognitive science shows, "Our sense of what is real begins with and depends crucially upon our bodies.... As embodied, imaginative creatures, we never were separated or divorced from reality in the first place" (Lakoff & Johnson, 1999, p. 17, p. 93). If If this is correct, then it becomes entirely understandable that the decline of embodied participation in human inquiry, arguably precipitated by the disconnection between mind and body, may have undermined the sense of being in touch with the real, engendering the Kantian mentalist dualism of a merely phenomenal world and an always inaccessible noumenal reality. If

As Tarnas (1991) suggested, this epistemic dualism contributes in fundamental ways to the existential estrangement of the modern self. By placing the

individual inexorably out of touch with the "real" world, the alienating Cartesian gap between subject and object is epistemologically affirmed and secured: "Thus the cosmological estrangement of modern consciousness initiated by Copernicus and the ontological estrangement initiated by Descartes were completed by the epistemological estrangement initiated by Kant: a threefold mutually enforced prison of modern alienation" (p. 419). Tarnas's analysis brings to the foreground the pernicious implications of this dualism for human participation in spiritual knowledge:

The Cartesian-Kantian paradigm both expresses and ratifies a state of consciousness in which experience of the unitive numinous depths of reality has been systematically extinguished, leaving the world disenchanted and the human ego isolated. Such a world view is, as it were, a kind of metaphysical and epistemological box. (p. 431)

One of the central issues at stake in this discussion is whether some kind of personal engagement and even transformation—such as body-mind integration, triumph over mental pride, or the development of contemplative competences—are needed for the enactment, apprehension, and assessment of certain truth claims (see Evans, 1993; Ferrer & Sherman, 2008b; Kasulis, 2002; Kripal, 2006; Taber, 1983). After all, most contemplative traditions hold that in order to ascertain their most fundamental insights, practitioners need to develop cognitive competences beyond the structures of linguistic rationality. In the end, as Kripal (2006) reminded us, "Rationalism and reductionism...are also state-specific truths (that is, they are specific to highly trained egoic forms of awareness), but their states of mind are more easily reproduced and communicated, at least within our present Western cultures" (pp. 141–142).

Indeed, modern Western education emphasizes the development of the mind's rational and intellectual powers, paying little attention to the maturation of other ways of knowing. A common outcome is that most individuals in the Western culture reach adulthood with a conventionally mature mental functioning but with poorly or irregularly developed somatic, emotional, aesthetic, intuitive, and spiritual intelligences (Ferrer, 2003; Ferrer, Romero, & Albareda, 2005; Gardner, 1983/1993). But then, can the modern mind admit that its mastered epistemic competencies may not be the final or necessarily superior cognitive plateau, and yet maintain and even sharpen its critical look toward oppressive, repressive, and untenable religious beliefs and ideologies?

These issues are central for assessing contemporary proposals for a scientific transpersonal psychology, which, following the mandates of modern science, posit the replicability and public nature of observation to be paramount. If specific types of personal transformation are necessary to enact or access particular spiritual referents, such replicable public nature is then naturally limited to those who have transformed themselves in those specific ways. Although conventional science makes cognitive demands to its practitioners (e.g., years of study, practical lab trainings, etc.), the demands of a personally transformative inquiry are obviously greater and rather unconventional from

mainstream scientific or philosophical perspectives (for notable exceptions, see Kasulis, 2002; Taber, 1983; Wallace, 2004).

Although Friedman (2002, 2013a) supported Tart's (1972) proposal for state-specific sciences, in which researchers may be required to undergo meditative training to study transpersonal phenomena, he restricted those phenomena to human experiences and remarked that such training "is not dissimilar to the years of mastery required by researchers in areas of conventional science" (Friedman, 2002, p. 185). These statements suggest that Friedman is discussing meditative skills training aimed at mapping states of mind, not the personal, existential, and even ontological transformation most traditions consider necessary to apprehend what have traditionally been understood as supernatural or metaphysical referents (see, e.g., Dupré, 1996; Hollenback, 1996; Lanzetta, 2008). In the next section, I turn to a closer examination of Friedman's account of science.

#### TRANSPERSONAL SCIENCE OR SCIENTISM?

Avoiding the hardest form of scientism, Friedman (2013a) repeatedly stated that the nonscientific approaches he seeks to expurgate from transpersonal psychology are "neither intrinsically more or less valuable than science" (p. 308). However, a strong scientism and positivism animate Friedman's assumptions that (a) modern science is less metaphysically biased and more progressive than other inquiry traditions, (b) a definite boundary can be drawn between science and nonscience, and (c) there is unity in the scientific method (for a lucid account of scientism, see Sorell [1991]). Each of these assumptions is problematic.

First, Friedman's (2002, 2013a) claim that scientific approaches are free (or freer) from the metaphysical baggage that in his view afflicts philosophical and religious traditions reveals his faith in the positivist dream of science as the unproblematic path to nondogmatic knowledge. After all, as Sorell (1991) concluded in his study, "The new scientism in philosophy is a kind of naturalism" (p. 177). In the same spirit, Friedman's insistence that scientific research into the transcendent is implausible closely follows the understanding in classical logical positivism that metaphysical claims or "statements alluding to some transcendental reality [are] meaningless, since they could not be verified" (Tauber, 2009, p. 92). In addition, Friedman (2013a) characterized science as distinctively progressive: "Scientific strategy facilitates progress, rather than stagnation, and differentiates transpersonal psychology as a science from traditional worldviews and religions, as well as philosophy" (p. 304). This statement suggests that Friedman wants to have it both ways: On the one hand, he wants to avoid the charge of scientism by stating that he does not regard science as superior to religion or philosophy; on the other, he claims that epistemic progress is exclusive of science (but then, why would not science be cognitively superior?). As history shows, however, many scientific disciplines from anatomy to astronomy to acoustics—do not show any substantial progress for decades whereas many nonscientific ones (e.g., literary criticism or military strategy) arguably do (Laudan, 1996). Thus, "progress" as specific to

science (and missing from nonscience) will not do. Although the case for "progress" is a thorny one in all inquiry traditions, one might argue that not only philosophical but also spiritual traditions show signs of epistemic progress, for example, in their understanding of liberation, response to new historical demands, or invention of novel methods to more effectively achieve their ends. In any event, it is important to remember, "faith in progress" as a distinguishing feature of science was another canon of the positivist doctrine that Friedman resuscitates (see, e.g., Tauber, 2009, p. 50).

Second, Friedman's (2002, 2013a) division between scientific transpersonal psychology and nonscientific transpersonal studies is questionable because no definite demarcation criterion between science and nonscience (or pseudoscience) has ever been successfully established. After a thorough review of proposed demarcation criteria (including method, verifiability, and falsifiability), Laudan (1996) wrote, "no demarcation line between science and nonscience, or between science and pseudo-science, ... would win assent from a majority of philosophers" (p. 211). The demarcation problem, Laudan concluded, is an ideological pseudoproblem:

If we would stand up and be counted on the side of reason, we ought to drop terms like "pseudo-science" and "unscientific" from our vocabulary; they are just hollow phrases which do only emotive work for us. As such, they are more suited to the rhetoric of politicians and Scottish sociologists of knowledge than to that of empirical researchers. (p. 222).

Furthermore, although relocating psychology within the science camp, <sup>18</sup> Friedman (2002, 2013a) perpetuates the classical Two Cultures split (Snow, 1959/1964) between the sciences (physics, chemistry, and biology) and the humanities (sociology, psychology, and anthropology) that contemporary sociology of knowledge and science studies have so effectively dismantled: "Science no longer resides outside the humanities as some distant colony of academic inquiry" (Tauber, 2009, p. 11). Even though the positivist picture of science still dominates "popular conceptions of science" (p. 12), Tauber (2009) continued, "science has been dethroned from its special positivist pedestal, and a One Culture mentality has emerged to challenge the Two Culture picture of science and society" (p. 12). Once scientism is *fully* exorcised from science, Tauber argued, science can be re-integrated within the larger tradition of humanistic inquiry from which it originated.

Third, Friedman's (2002, 2013a) portrayal of science as possessing a singular method with invariant qualities that can be set against "nonscientific" approaches resurrects another long-gone positivist dream. The very failure to demarcate between science and nonscience was largely due to, and intensified by, the vast diversity of so-called scientific practices. For Laudan (1996), the lack of agreement about the features of "the scientific method" means that the "unity of method" thesis should be regarded as refuted. As Duhem (1908) showed, accounts of the scientific method "bore little resemblance to the methods actually used by working scientists" (Laudan, 1996, p. 214)—a conclusion extensively corroborated today by research into actual scientific

practice (e.g., Shapin, 2010; for a balanced review of science studies, see Tauber, 2009). Despite the exaggerations of some postmodern constructionists, Tauber (2009) concluded, "Historical and sociological studies have demonstrated beyond the reasonable doubt that the working *practices* of scientific disciplines are both incompletely and inaccurately portrayed by the methodologies to which scientists officially subscribe" (p. 130).

What is more, Dupré (1993, 2004) pointed out that scholars typically use the rhetoric of science's methodological unity to ideologically dismiss (perhaps with good reasons) disciplines whose knowledge claims they consider to be farfetched, unreliable, or dogmatic. As Dupré (2004) wrote, however, "If one thinks of the daily practice of a theoretical physicist, a field taxonomist, a biochemist, or a neurophysiologist, it is hard to believe that there is anything fundamentally common to their activities that constitutes them all as practitioners of the Scientific Method" (p. 42). Furthermore, Dupré (1993) argued, such a "disunity of science" is not a temporary state of affairs to be overcome in the future by superior cognitive or technological achievements, but "rather reflects accurately the underlying ontological complexity of the world" (p. 7). Summing up the issues with both the demarcation project and the unity of science, de Caro and MacArthur (2004b) wrote:

...science has no essence and ... the very idea of a sharp division between what is scientific and what is not is highly questionable. Indeed, the *ideal* of the unity of sciences is an unrealized and unrealizable dream. The point is not just that there is no single method or set of methods that is properly called the scientific method, but, more than this, that there is no clear, uncontroversial, and useful definition of science to do the substantial work scientific naturalists require of it. (p. 15)

Taken together, these assumptions about science disclose a positivist scientism in Friedman's (2002, 2013a) proposal that I find counterproductive for the integrity and appropriate epistemological legitimation of transpersonal psychology. In the end, as Walach (2013) pointed out, "at least part of the transpersonal enterprise is in fact an implicit or explicit *challenge to the entire history and set of methodologies by which science and scientific psychology* is done" (p. 68). Before exploring alternatives to Friedman's project, I briefly consider its implications for transpersonal research.

### SCIENTIFIC TRANSPERSONAL RESEARCH PROGRAMS

In a section suitably titled, "What is left for transpersonal psychology to study," Friedman (2013a) reiterated that transpersonal psychology should exclusively research the physical and psychological aspects of transpersonal phenomena. Arguably controverting his earlier support of qualitative methods, Friedman (2013a) further claimed that transpersonal psychology should not research lived transpersonal experiences and instead study the expansion of one's "self-concept" or mental-linguistic understanding of one's identity (e.g., using his Self-Expansiveness Level Form; Friedman, 1983). Since Friedman's

(2013a) overriding goal is "to conceptualize and operationalize a transpersonal approach devoid of metaphysical assumptions" (p. 204), this focus on the self-concept is justified because he believes that the "notion of self as experienced can be equated to consciousness itself, and is a metaphysical notion every bit as obscure as transcendence" (p. 205).

To be sure, researching the self-concept is a legitimate endeavor, but as a transpersonal scholar I am mostly interested not in what people "think" about their identity but how they actually "experience" it. In my view, the "self-concept" is a construct whose value to measure or assess transpersonal states or growth is dubious. While the self-concept can change after a lived expansion of consciousness, it can also expand, for example, after reading an evocative spiritual book—think of Watts's (1966/1989) The Book: On the Taboo Against Knowing Who You Are—or after becoming intellectually familiar with transpersonal psychology, the notion of the ecological self, and so forth. Transpersonal psychologists should seek to assess transpersonal states through the study of changes in felt-sensed self-identity, not of mental views about such identity. Friedman's belief that only the self-concept can be researched is mistaken changes in lived self-identity can be identified via qualitative methods, for example, longitudinal phenomenological studies of meditation practice. Friedman might respond that phenomenological reports necessarily refer to the self-concept, but it is one thing to report one's views on self-identity, and quite another to report one's lived experience of such identity (see, e.g., van Manen, 1990)

Interestingly, Friedman (2013a) claimed to embrace not only James's (1912/ 2002) radical empiricism but also Tart's (1972) state-specific sciences approaches that consider data from both outer and inner (or introceptive) senses. Contra mystical claims, however, Friedman quickly added that nonduality and other spiritual states are terms without empirical referents and therefore they lie beyond the scope of scientific transpersonal psychology. The issue at stake here is what Friedman considers to be "inner data." After including phenomenological and electroencephalographic data, he qualified the kind of empirical data that in his view a community of meditators can produce: "Insofar as some in such community might have what could be described as transcendent experiences, those would be outside the realm of science to study directly (i.e., I would see these direct experiences as noumenal, not phenomenal)" (p. 309). Once again, Friedman's neo-Kantianism traps him in an epistemic box that is hermetically sealed by its own critical presuppositions—this time, one that James's radical empiricist openness to direct nonlinguistic experience actually overcomes (Blum, 2014; Taylor & Wozniak, 1996). All the above suggests the need to explore transpersonal epistemologies and research programs free from neo-Kantian assumptions and exclusive allegiance to a naturalistic metaphysics—a task for the rest of this essay.

## A PARTICIPATORY METAPHYSICAL PLURALISM

Integrating the work of Davidson (1984), Tarnas (1991), and Varela, Thompson, and Rosch (1991), among others, participatory approaches eschew

the Kantian two-worlds dualism by regarding human beings as vehicles for the creative self-unfolding of reality and the enaction (or "bringing forth") of directly knowable spiritual worlds, realms, or domains of distinctions (e.g., Ferrer, 2002, 2008a; Ferrer & Sherman, 2008a; Hartelius & Ferrer, 2013; Irwin, 1996, 2008). Whereas perennialism (and confessional and theological stances) posits a single or primary transcendent reality (see Ferrer, 2000, 2002) and modern science subscribes to a naturalistic worldview that brackets, denies, or reduces supernatural referents (e.g., de Caro & MacArthur, 2000, 2004a), participatory pluralism allows for a plurality of enacted spiritual worlds that can in principle be accounted for in both naturalistic and supernaturalistic fashions:

...to embrace a participatory understanding of religious knowledge is not *necessarily* linked to confessional, religionist, or supernaturalist premises or standpoints. ...virtually all the same participatory implications for the study of religion can be practically drawn if we were to conceive, or translate the term, *spirit* in a naturalistic fashion as an emergent creative potential of life, nature, or reality. ...Whether such creative source is a transcendent spirit or immanent life will likely be always a contested issue, but one, we believe, that does not damage the general claims of the participatory turn. (Ferrer & Sherman, 2008b, p. 72)

Thus, whereas both perennialism and scientism commit transpersonal psychology to a single metaphysical worldview—transcendentalist and naturalistic, respectively—participatory frameworks free the field from such univocal vows and invite researchers to remain open to multiple metaphysical possibilities. As Daniels (2005) pointed out, "It is vital that we remain pluralistic at this time and do not fall into the trap of committing the discipline as a whole to any particular ontology" (p. 231).

While dispensing with dubious equations among spiritual ultimates (e.g., the Tao is God or Buddhist emptiness is structurally equivalent to the Hindu Brahman), participatory pluralism affirms an undetermined mystery or creative power as the generative source of all spiritual enactions (Ferrer, 2002, 2008b). This shared spiritual dynamism, however, should be sharply distinguished from any Kantian-like noumenon or "thing-in-itself" endowed with inscrutable qualities in which all spiritual ultimates are always incomplete, culturally conditioned, or cognitively constrained phenomenal manifestations (e.g., Hick, 1992). In contrast, an enactive participatory epistemology (Ferrer, 2002, 2008a; Malkemus, 2012) does away with the Kantian dualism by not only refusing to conceive of the mystery as having objectifiable pregiven attributes (e.g., personal, impersonal, dual, or nondual), but also affirming the radical identity of the manifold spiritual ultimates and the mystery—even if the former do not exhaust the generative ontological possibilities of the latter. Put simply, the mystery cocreatively unfolds in multiple ontological directions (Ferrer, 2011b).

The question rightfully arises: Would not such a participatory account be another metaphysical worldview competing for supremacy? After all, no

spiritual vision or conceptual framework is metaphysically neutral, and the undetermined nature of the mystery espoused by the participatory approach can be seen as especially consistent with Buddhism's emptiness and apophatic mystical accounts (see Duckworth, 2014; Ferrer, 2002). My use of the term undetermined, however, is eminently performative—that is, it seeks to evoke the sense of not-knowing and intellectual humility that I find most fruitful in approaching the creative power that is the source of our being (Ferrer, 2008a). Rather than affirming negatively (as the term indeterminate does), "undetermined" leaves open the possibility of both determinacy and indeterminacy within the mystery, as well as the paradoxical confluence or even identity of these two apparently polar accounts. As Duckworth (2014) observed regarding this proposal, metaphysical biases are thus neutralized for the most part; such "undetermined ultimate precludes emptiness from being the final word on reality because, being undetermined, ultimate reality can also be disclosed as theistic in a personal God. And importantly, this 'God' is not a lower reality than emptiness" (pp. 346–347). Irwin (2008) concurs: "The participatory model is not based on preconceptions about the validity of (or relationship to) any particular metaphysical view, but seeks to elucidate this view as yet another example of authentic spiritual encounter" (p. 200).

The problem of doctrinal ranking is further minimized by both the participatory grounding of qualitative distinctions on pragmatic values (e.g., integration, embodiment, selflessness), and its equiplurality principle, according to which "there can potentially be multiple spiritual enactions that are nonetheless equally holistic and emancipatory" (Ferrer, 2011b, p. 4). I stand by these values—not because I think they are universal, objective, or ahistorical (they are not), but because I firmly believe that their cultivation can effectively reduce today's personal, relational, social, and planetary suffering. To be sure, the specificities of the various spiritual, transformational goals often derive from ontological views about the nature of reality or the divine, but, as the equiplurality principle maintains, the participatory ranking is not itself precipitated by the privileging of a single spiritual goal, but rather explodes into a plurality of potentially holistic spiritual realizations that can occur within and outside traditions. This principle is founded on the double rejection of an objectivist account of the mystery and a representational paradigm of cognition, according to which there can be only one most accurate representation of an original template with pregiven features (for nonrepresentational epistemologies, see Frisina, 2002). Taken together, these features release participatory spirituality from the dogmatic commitment to any single spiritual system and pave the way for a metaphysically and pragmatically grounded spiritual pluralism (cf. Irwin, 1996).

In addition, this participatory approach bridges the *epistemic gap between human experience and reality* that is intrinsic to neo-Kantianism. This alienating gap is not only problematized by the aforesaid disembodied origins of Kantian dualism, but also bridged by Davidson's (1984) dismantling of the scheme-content dualism, Tarnas's (1991) participatory epistemology, elements of Bhaskar's (1989) critical realism and James's (1912/2002) radical empiricism, as well as modern embodied cognitive science (e.g., Chemero, 2009; Clark,

1997; Varela, Thompson, & Rosch, 1991). Many of these approaches, Schillbrack (2014) argued, restore metaphysics as a viable form of contemporary cognitive inquiry.<sup>21</sup>

At this juncture, it is important to distinguish between two different meanings of the term *metaphysics*. On the one hand, the notion of metaphysics in Western philosophy is generally based on the distinction between appearance and reality, with a "metaphysical statement" being one claiming to portray the "Reality" presumably lying behind the realm of appearances (van Inwagen, 1998). In addition to this use, on the other hand, many religious traditions talk about "metaphysical worlds" to refer to levels, realms, or dimensions of reality existing beyond the sensible world or within the subtle ontological depths of human consciousness (see Ferrer, 2011a; Schillbrack, 2014). Whereas Schillbrack (2014) cogently argued that dropping Kantian assumptions renders religious metaphysical claims cognitively viable in the first sense ("superempirical," in his terms), I propose that it also allows *entertaining the plausibility of a deep and ample multidimensional cosmos in which the sensible world (as narrowly conceived by modern naturalism) does not exhaust the possibilities of the Real.* 

The consequences of this move for transpersonal research are arguably profound: Stripping the supernatural of its monolithic and transcategorical clothes allows a *re*-consideration of the existence of diverse subtle realms of energy/consciousness. Intersubjective agreement about these realms can then be pursued in special states of consciousness (after all, ordinary consciousness was evolutionarily shaped to optimize survival in the natural world). The import of not ruling a priori the existence, or the possibility to apprehend, such realms is exemplified by the phenomenon of "shared visions" discussed in the next section.

## THE EPISTEMOLOGICAL CHALLENGE OF SHARED VISIONS

In 1998, I spent one month in a Shipibo *vegetalista* center in the jungle nearby Iquitos, Peru, drinking the entheogenic brew called ayahuasca every other day (for ayahuasca studies, see Metzner, 2014; Shanon, 2002). At one of my first ayahuasca sessions, I was struck by the vision of a number of nonphysical entities (animal, human, and other-than-human) wandering in the *maloca* (traditional ceremony shed). Perhaps the most striking vision concerned certain entities well known in Indigenous medicine circles.

The vision began with my perception of a thick energetic thread of white light clearly emerging from the healer's mouth during the singing of an *icaro* (ayahuasca healing song). When I visually followed the thread to the farther corners of the *maloca*, I realized that it was attached to several nonphysical entities entering into the ceremonial shed. Although of humanoid shape (i.e., they had a head, body, arms, and legs), the entities were appreciably taller than humans and apparently made of a fuzzy white light that concealed any identifiable traits beyond their general form.

The "astral doctors," as I later learned these entities are called, <sup>22</sup> moved with apparent volitional precision around a room, for example, situating themselves in front of the ceremony's participants and extending their arms to make contact with specific areas of participants' bodies, specially the heart and the vital center. When my turn arrived, their contact resulted in dramatically tangible energetic adjustments of incredible finesse in those centers, accompanied by the feelings of deeply healing, profound gratitude, and instinctive trust in the benevolent nature of the entities. This experience led to a new understanding of the healing power of (at least that particular) ayahuasca ceremony as emerging from the complex interplay of the medicine, the healer, the *icaro*, and the astral doctors.

The next morning, when I asked the healer about my visions, he nodded his head and verbally corroborated the presence of "astral doctors" at the ceremony. Fascinated by the intersubjective agreement about such "open-eye" visions, I decided to interview the center director and Shipibo elder Guillermo Arevalo (see Ferrer, 2013). During the interview, after distinguishing between ayahuasca visions emerging from personal imagination and those of a more transpersonal or shared nature, Arevalo stated that he and other healers often contrasted their perceptions searching for intersubjective agreement:

We can plan to discuss these perceptions before a ceremony and then talk about it afterwards. In many cases, I ask another shaman sitting in the same ceremony what he saw in order to gain certainty through such agreement. If there is no clear agreement, we can try to achieve it at the following ceremony. (as cited in Ferrer, 2013, p. 17)

Overall, this procedure struck me as remarkably similar to the scientific emphasis on public observation and replicability with one (arguably huge) difference—these healers were discussing entities that scientific naturalism would consider fictitiously supernatural.

The most astonishing shared visionary event I participated in, however, occurred some years earlier at a San Pedro (wachuma) ceremony in Urubamba, Peru (for studies on the Peruvian cactus San Pedro, see Heaven, 2012; Sharon, 1990). Several hours into the ceremony, and totally unexpectedly, I began seeing in front of my open eyes what looked like red, energetic spiderwebs of great complexity that elastically responded to my physical contact. I was so taken by the clarity and interactive nature of the vision that I approached the only other participant—a young U.S. woman who was drinking San Pedro for first time—and, pointing in the direction of the webs, asked her (without describing what I was seeing) whether she could see anything there. To my shock, she described the red, energetic spiderwebs exactly in the ways I was seeing them. When I asked Victoria (the healer), she not only corroborated she was seeing them, but also stated that such energetic visions were a common occurrence in San Pedro ceremonies. The red spiderwebs marked the beginning of nearly two hours of breathtaking external visionary experiences (I later titled the entire episode "Harry Potter Meets the Matrix")—blue and green energies curatively entering my body, contact with benevolent Indigenous spirits, and perceptions of energy vortices of diverse colors in the room, some of which stemmed from Victoria's "power objects."

Because San Pedro preserves one's critical capabilities intact (at least in my eight-year experience with this plant), I had my "researcher hat" on during most of the visionary journey. In disbelief about the shared nature of the visions, I repeatedly asked both the other participant and the healer to describe the specificities of their visions in order to verify whether they matched my perceptions. Invariably, when pointed in the direction of my vision and asked "what do you see there?", they accurately described the color, shape, and directional movements of the various energetic fields I was seeing. This event strongly suggested to me that San Pedro allowed human sight to perceive or enact subtle energetic dimensions of reality; actually, one can often feel San Pedro organically re-training human sight, for example, re-focusing it on the space in-between objects or forms. From this space, in my experience, subtle visions emerge.

The literature is not entirely silent on this type of experience. Indigenous people widely claim that their medicines allow access to an enhanced sensory faculty granting direct perception of subtle energies and spiritual entities—called, for example, "true seeing" by the Matsigenka of Southern Peru (Sheppard, 2014), "second sight" by the Thonga of Mozambique or "stargazing" by the Navajo (Turner, 1992). Elements of the phenomena I experienced have been also documented in the scholarly literature on entheogenic and healing visions. In addition to Shanon's (2002, pp. 69-85) reports of a variety of ayahuasca "open-eye visualizations," one of the most powerful examples of shared vision I am familiar with is described in Edith Tuner's (1992) research into ihamba, a Zambian Ndembu healing ceremony in which the healer extracts an invisible spirit (supposedly visible as an ivory tooth) from the patient's body. Whereas thirty years earlier her husband the anthropologist Victor Turner's (1967) "scientific" ethnographic account famously portrayed Ndembu healers as therapeutically skilled sleight-of-hand magicians and denied ontological status to the "extracted" invisible spirit, E. Turner's (1992) participation in the ritual (which included ingestion of a nonhallucinogenic leaf medicine called *nsompu*) reportedly opened her to the reality of the Ndembu spiritual world. Central to this discussion, she saw the following and later reported that three healers and the patient shared the same vision:

Suddenly Meru [the patient] raised her arm, stretched it in liberation. And I saw with my own eyes a giant thing emerging out of the flesh of her back. The thing was a large gray blob about six inches across, a deep gray opaque thing emerging as a sphere...The gray thing was actually out there, visible, and you could see [the healer] Singleton's hands working and scrabbling on the back—and then the thing was there no more. Singleton has it in his pouch, pressing it with his other hand as well. (p. 149)

Intriguingly, only the five people ingesting the nonhallucinogenic medicine saw the "giant thing," the rest of the group saw only the tooth, which, E. Turner (1992) concluded, should be considered the physical manifestation (vs. a mere

symbol) of the immaterial spirit. She stressed: "I repeat that I did not merely intuit the spirit emerging from Mera's back but saw it, saw it with my open eyes" (pp. 189–190). This fascinating account powerfully shows how social-scientific reports shaped by naturalistic assumptions can be problematized through participatory research open to Indigenous cosmologies, emic epistemologies, and ostensibly supernatural factors (see also Irwin, 1994).

What to make of these phenomena? Naturalistic scholars can easily dismiss inner and/or individual visions of this kind as private, subjective, or brain hallucinations.<sup>23</sup> But what about intersubjectively shared outer visions such as the ones described above? In general, as Sacks (2012) indicated, the "shareable" (p. ix) nature of sensory claims is what distinguishes successful perception from hallucination. In their discussion of hallucinations, for example, Aleman and Larøi (2008) asked: "What happens in the brain when people see things others do not see...?" (p. 147). Moreover, whether in science or philosophy intersubjective agreement or consensual validation is considered the final mark of "objectivity" or "reality," so what to make of shared visual perceptions of supernatural phenomena such as nonphysical entities or spirits? The naturalistic mind may understandably appeal to the notion of "collective" or "public hallucinations," such as rainbows, mirages, reflections in the water, and the like (see van Fraassen, 2008).<sup>24</sup> Unlike the ayahuasca astral doctors, however, rainbows do not autonomously move, intentionally touch people, and palpably alter a person's embodied experience. Unlike the wachuma visions of energetic webs and vortices, mirages neither respond pliantly to physical contact nor do they persist when viewed from different angles. In addition, unlike Turner's (1992) vision of the *ihamba* spirit, water (or mirrored) reflections do not emerge from a human body at the climax of an extraction healing ritual.

## BEYOND NATURALISM AND SUPERNATURALISM: TOWARD A PARTICIPATORY RADICAL EMPIRICISM AND RESEARCH PROGRAM

The failure of "public hallucinations" models to account naturalistically for these phenomena leads me to conclude that the above participant-observation reports not only present a powerful challenge to scientific naturalism (and materialism), but also suggest the existence of subtle energetic dimensions of reality coexisting with our own. Equally important, these phenomena raise the possibility of intersubjective testing of so-called supernatural claims through a radical empiricist epistemology (after James, 1912/2002) that challenges the scientist attachment of "empirical validity" to "naturalistic sensory evidence." After all, spiritual practitioners following similar contemplative and ritual techniques generally reach intersubjective agreement about spiritual insights and realities, even if the falsification of those claims is not possible (Ferrer, 2002, pp. 62–65).

Even if one were to endorse a naturalistic metaphysics, Stroud (2004) names the appropriate question in his 1996 APA (American Philosophical Association) presidential address: "What is and what is not to be included in one's conception of nature?" (p. 22). Although not fond of supernatural

claims, Stroud recommended an "open naturalism" that "is not committed in advance to any determinate and therefore potentially restrictive conception of what is so" (p. 35). Such open naturalism simply "says that we must accept as true everything we find we have to accept in order to make sense of everything that we think is part of the world" (p. 35). It may be important to remember here that the rational plausibility of so-called supernatural forces or entities is contingent on one's conscious or unconscious metaphysical commitments. As Ellis (2009) indicated, there is an inescapable logical circle here: "A postulated existent is ontologically plausible if and only if it fits into an adequate metaphysical theory. And a metaphysical theory is adequate if and only if it accommodates all of the things that we truly believe in" (p. 19).

In this light, I propose that transpersonal psychology should overcome the naturalistic/supernaturalistic divide, retire both terms, and endorse a more liberal or *open naturalism*—one that not only studies the physical and psychological dimensions of transpersonal phenomena, but also is free from materialism and reductionism, thus being open to both the ontological integrity of spiritual referents and the plausibility of subtle dimensions of reality. Once free from a priori allegiance to any particular metaphysical worldview (whether scientist or religionist), researchers can consider multiple methodological standpoints (emic and etic, insider and outsider), epistemologies (objectivist, constructivist, participatory), and metaphysical frameworks (scientific naturalism, perennialism, participatory pluralism) in the discernment of the most cogent account of the perceived phenomena.

Openness to the heuristic value and potential validity of alternate epistemic and metaphysical frameworks does not snare a researcher in relativistic dilemmas. The attempt to rise above the inevitable biases of Western frameworks should not degenerate into a vulgar relativism incapable of offering grounds for qualitative distinctions or cross-cultural criticism. This unfortunate outcome can be avoided by dialogically evaluating all knowledge claims—etic and emic, insider and outsider, naturalistic and supernaturalistic—through validity standards of both dominant and marginal Western and non-Western epistemologies in whatever measure may be appropriate according to the context of the inquiry and the type of knowledge claims. In this scenario, the dividing line between sound and weak scholarship should not be traced between Western and non-Western epistemologies—or naturalistic and supernaturalistic claims—but between methodologies that lead to radically empirical intersubjectively testable outcomes and/or discernible pragmatic consequences and those which do not.<sup>25</sup>

In light of the discussion so far, questions arise for further research to consider. Can transpersonal research programs be open to all accounts, "naturalistic" and "supernaturalistic"? Might such a dialogical approach eventually deconstruct the binary opposition and disclose different ways to "think the world" beyond the naturalistic/supernaturalistic divide? What is lost and what is gained if transpersonal psychologists employ such an

epistemologically and metaphysically pluralistic approach? Might this approach lead to a more flexible, expansive, or liberal open naturalism free from materialism—one that takes seriously the plausibility of subtle dimensions of reality?<sup>26</sup> Could this open naturalism be capable of disrupting Western epistemic violence and fostering a more symmetrical dialogue—perhaps even collaborative inquiry—between transpersonal researchers and the world's spiritual practitioners? For now, my provisional stance is that each case (knowledge claim) needs to be assessed independently. No a priori or generic hierarchical relationship between so-called naturalist and supernaturalist accounts—and related etic and emic, outsider and insider, Western and non-Western accounts—can be legitimately established to ascertain the most accurate account of what truly transpires in a spiritual or transpersonal event (e.g., a Kalua tantric ritual or a Shipibo *ayahuasca* ceremony).

There is no methodological reason why transpersonal psychologists cannot research shared external visions. Such a research program could entail the intake of a visionary medicine—such as San Pedro or ayahuasca—by a team of researchers focusing their attention on the possible occurrence of external visions.<sup>27</sup> This type of research could be also developed in collaboration with traditional practitioners such as shamans or healers. At a first stage (preparation), coresearchers would agree to contrast their perceptions both during and after ceremonies while being mindful of peer-pressure influences, unconscious group collusion, and other potential methodological pitfalls (see Heron, 1998). The second stage (journey) would consist of the actual intake of the medicine and ensuing group visionary journey. At a third stage (internal comparison and interpretation), coresearchers would contrast their experiences and search for intersubjective agreement in their visions. Were shared visions identified, coresearchers would discuss their ontological nature from a pluralistic epistemological perspective that would not impose a priori metaphysical limits to the nature of the inquiry outcomes. Multiple methodological standpoints, epistemologies, and metaphysical frameworks could be considered to discern the more appropriate account of the perceived phenomena. At a final stage (external comparison and re-interpretation), coresearchers could look for contrasts between the group's inquiry outcomes and available Western and non-Western literature about the meaning and ontological nature of the shared visions.

To be sure, actual research is necessary to assess the epistemic fertility and methodological soundness of such a research program. Contra Friedman's (2002, 2013a) proposal, however, I suggest that transpersonal psychologists should be able to carry out these types of research and still rightfully call themselves *psychologists*.

## Conclusion

Transpersonal psychology should indeed encourage scientific studies, but Friedman's (2002, 2013a) division of labor between a "scientific" transpersonal

psychology and "nonscientific" transpersonal studies is neither cogent nor salutary. To turn transpersonal psychology into a modern scientific discipline achieves precisely what Friedman seeks to avoid, that is, binding transpersonal psychology to a singular naturalistic worldview with a metaphysical status equivalent to religious supernaturalism. Although transpersonal psychologists should definitively remain vigilant against the infiltration of metaphysical or religious ideologies in the field, scientific naturalism as an alternate ideology should not be the exception. Whereas it might be impossible to carry out scholarship without metaphysical assumptions, it is important to be explicitly self-critical about them and avoid presenting naturalistic science as less metaphysically biased or as the only path to progressive knowledge. The alternative, I propose, is to work with a larger naturalistic-inquiry framework that is open to the viability of a deep and multidimensional cosmos in which modern science's narrow "naturalistic" world does not necessarily exhaust the possibilities of the real.

Transpersonal scholars should also scrutinize the neo-Kantian assumptions lying beneath skepticism and agnosticism toward the ontological status of certain spiritual realities. It is fundamental to be aware that such a stance, far from warranting neutrality or impartiality, is the fruit of a Western, dualistic, and arguably disembodied epistemological ethos that automatically renders suspect many spiritual claims about the nature of knowledge and reality. In their attempts to promote the scientific legitimacy of the field, some transpersonal psychologists have prematurely committed to a neo-Kantian dualistic epistemology that is in fact ideologically tied to a naturalistic, and often materialistic, metaphysics. Whether such a narrowly conceived naturalistic worldview will ultimately be cogent is unknown (I strongly suspect that it will not), but transpersonal scholars should note the metaphysical presuppositions of such methodological agnosticism; in this way, they can avoid assuming or defending its purportedly metaphysically neutral status and thereby falling prey to one of science's most prevalent ideologies (van Fraassen, 2002).

As a possible way forward, I have suggested the following steps:

- 1. recognizing the inevitability of metaphysics in both science and religion;
- 2. minimizing parochialism via working with inquiry frameworks that are open to both "naturalistic" and "supernaturalistic" accounts of spiritual phenomena even if this approach may ultimately lead to the overcoming of such a binary opposition (e.g., in the form of an open naturalism);
- 3. developing methodological approaches that dialogically engage emic and etic claims, as well as Western and non-Western epistemologies, in the understanding and assessment of spiritual knowledge claims;
- 4. approaching religious traditions in the spirit of a participatory pluralism that is open to the ontological richness of religious worlds without reducing them to any single transcendentalist or naturalistic worldview; and

5. critiquing oppressive and repressive inner and outer systems of domination, selfishness, dissociation, and violence within, between, and among human beings, other sentient beings, and the world.

Methodologically, I firmly believe that such an approach calls for transpersonal psychology to embrace empirical (quantitative and qualitative), theoretical (e.g., hermeneutic, comparative, integrative, critical, feminist, postcolonial), and contemplative/visionary methods. As Lancaster (2013) argued, "The defining feature of transpersonal psychology is that it integrates across all the levels [neuroscientific, cognitive and neuropsychological, psychodynamic, and spiritual/mystical] in its approach to understanding the mind and processes of transformation" (p. 225). Following Lancaster's suggestion, it is time to work towards a metaphysically, epistemologically, and methodologically plural transpersonal psychology that, bridging previously polarized camps (e.g., science and religion, modern and postmodern, or empiricism and hermeneutics), may well become one of the first truly holistic disciplines of the 21st century.

#### Notes

<sup>1</sup> While strongly advocating for quantitative (e.g., psychometric) studies, transpersonal scientists regard most qualitative approaches as scientific (e.g., Friedman, 2013a; MacDonald & Friedman, 2013). I therefore use the terms *scientific* and *empirical* interchangeably to include both quantitative and qualitative research.

<sup>&</sup>lt;sup>2</sup> This is in itself a rather peculiar claim: to wit, are not theoretical physicists *physicists*? Are not the publishing authors in the *Journal of Theoretical Biology* biologists? Note also that accepting Friedman's (2002, 2013a) proposal would forbid use of the term *psychologies* for (a) the many schools of the depth psychological tradition (e.g., classical, contemporary, and intersubjective psychoanalysis; Jungian, analytic, and archetypal psychologies; object-relations theory and self-psychology); (b) the robust nonempirical subfields of contemporary psychology (e.g., theoretical psychology, critical psychology, liberation psychology, or psychology of science); and (c) central elements of evolutionary psychologies, and phenomenological, existential, and hermeneutic psychologies. In this regard, Slife and Williams (1997) listed more than a dozen of academic psychological journals "devoted entirely, or in part, to theoretical work" (p. 125). Finally, it is unclear how Friedman's scientific transpersonal psychology would be different from disciplines such as the psychology of religion or the scientific study of religion. Despite Friedman's (2002) *de jure* pronouncement against such a possibility, his proposal seems inevitably to lead to the gradual dissolution of the field into these mainstream fields—perhaps becoming a kind of fringe subfield dealing with those particular spiritual experiences called *transpersonal*.

<sup>&</sup>lt;sup>3</sup> Although naturalism is widely regarded today as essential to the modern scientific worldview (e.g., Mahner, 2012; Schafersman, 1997), the association of naturalism and science was largely historically contingent (Bilgrami, 2000; Kubrin, 1980). Science has the potential to operate with supernaturalistic assumptions as evidenced by the many past scientific explanations (even Newton's) appealing to supernaturalistic factors (Clarke, 2009). For a defense of science's potential openness to both naturalistic and supernaturalistic worldviews, see Fishman (2007).

<sup>&</sup>lt;sup>4</sup> Although usually hand-in-hand, naturalism and materialism are not synonymous. Whereas all materialists are naturalists of some sort, one can be a naturalist without committing to materialism or to the view that all which truly exists is made of matter. Expanded or liberal forms of naturalism embrace the reality of nonmaterial entities such as numbers, psychological states, and perceptions (see De Caro & MacArthur, 2000, 2004; Nagel, 2012; Schafersman, 1997).

<sup>&</sup>lt;sup>5</sup> My endorsement of van Fraassen's (2002) account of the ideological status of naturalism and materialism does not mean that I subscribe to his constructive empiricism (2002, 2008), which results in the rejection of all metaphysical considerations about nature and reality. For a cogent rebuttal to van Fraassen's critique of metaphysics, see Chakravartty (2007, pp. 20–26).

<sup>&</sup>lt;sup>6</sup> Physicalism is a narrower stance than materialism: The latter is the view that only matter exits, and the former holds that the micro-entities studied by physics are ontologically or explanatorily primary (see Dupré, 1993).

Nagel (2012) agrees: "Such a world view [reductionist and materialist naturalism] is not a necessary condition of the practice of any of those sciences [biology, chemistry, and physics], and its acceptance or non-acceptance

would have no effect on most scientific research" (p. 4). The failure of psychophysical reductionism, Nagel continued, shows that materialist naturalism "is ripe for displacement" (p. 12). For Nagel, the most cogent alternative is to conceive that mind is "a basic aspect of nature" (p. 16). For the medieval origins of the Western distinction between the natural and the supernatural, see Bartlett (2008).

- <sup>8</sup> Naturalism can also be religious in the sense that nature can be understood religiously and evoke religious feelings—for contemporary articulations of religious naturalism, see Crosby (2002), Hague (2010), and Stone (2009). Religious traditions, such as certain Zensenools, that do not posit metaphysical or supernatural referents could also be included within this category.
- <sup>9</sup> Discussing the scientific dismissal of paranormal evidence, Friedman and Hartelius (2013) made a strikingly similar point: "If a modern metaphysics is imposed on research (cf. Mahner, 2012), then those very aspects of the phenomena will necessarily be discounted *a priori*, and the knowledge that might be generated from them will be lost. Evidence challenging the *de facto* metaphysical assumptions that tend to accompany science is disallowed on the grounds that it challenges those assumptions—rather like a judge who refuses to consider a motion to recuse him- or herself" (p. xxv).
- <sup>10</sup> This proposal is not new. Daniels (2005) wrote: "As transpersonal psychologists, we should aim to bracket as far as possible ALL metaphysical assumptions in what should essentially become a phenomenological examination of experiences of transformation" (p. 203; see also Daniels, 2001). Similarly, adopting Jung's neo-Kantianism (Nagy, 1996), Washburn (1995) pointed out: "we simply cannot know ... whether the power of the Ground, in addition to being an intrapsychic phenomenon, is also an extrapsychic (metaphysical, cosmic) noumenon" (p. 130). For a transpersonal critique of this position, see Lancaster (2002).
- <sup>11</sup> For critical discussions of neo-Kantianism in transpersonal and religious studies, see Adam (2002), Blum (2014), Ferrer (2000, 2002), Ferrer and Sherman (2008b), Forgie (1985), Forman (1999), King (1999), and Schillbrack (2014).
- <sup>12</sup> After a balanced discussion of the philosophical foundations of scientific transpersonal psychology, MacDonald (2013) also assumed a neo-Kantian epistemology. This is evident in his accepting the Western dualism between the world or appearances (human perception) and reality (the world as-it-really-is; p. 313), as well as the derived dualism of map and territory. Although the reality-and-appearances dualism is not strictly equivalent to the Kantian two-world doctrine (Schillbrack, 2014; van Fraaseen, 2008), identical skeptical consequences emerge when such reality behind appearances is considered to be cognitively inaccessible.
- <sup>13</sup> Friedman's views are strongly reminiscent of Katzian constructivism, whose Jewish leanings have been exposed by religious studies scholars (see Evans, 1989; King, 1999; Smith, 1987). In addition, metaphysical agnosticism has been denounced as "cryptotheological," or inadvertently perpetuating theological agendas in its implicitly positing a single transcendental referent about which scholars need to remain agnostic (Fitgerald, 2000).
- <sup>14</sup> For critiques of objectivism, see Bernstein (1985), Bordo (1987), and Megill (1994).
- <sup>15</sup> But then, why not to go all the way and replace folk psychological language with scientific brain jargon, as Churchland (1986) famously proposed (i.e., talk about neural dynamics instead of beliefs or feelings)? I suspect that Friedman would reject such an eliminative materialist project, but his proposal is congruent with it—especially considering modern science's allegiance to ontological materialism and reductionism (MacDonald, 2013; Mahner, 2012).
- <sup>16</sup> For a thorough account of how Lakoff and Johnson's (1999) "embodied realism" paves a middle way between objectivism and postmodern relativism in both the sciences and the humanities, see Slingerland (2008). On embodied cognitive science in general, see Varela, Thompson, and Rosch (1991), Chemero (2009), and Shapiro (2014).
- <sup>17</sup>Cf. Schillbrack (2014): "Kant's distinction does not *challenge* the alleged metaphysical desire to describe a noumenal reality but rather *invents* it" (p. 173*n*5). The patriarchal foundations of the Cartesian-Kantian legacy could also be explored (cf. Tarnas, 1991). Discussing the modern conceptualization of mysticism, for example, Jantzen (1995) denounced the androcentricism of this existential stance: "Feminists...have demonstrated the extent to which the Cartesian/Kantian 'man of reason' is indeed male" (pp. 343–344). On the masculinized origins of Cartesian thinking, see also Bordo (1987).
- <sup>18</sup> Supporting the ongoing (and arguably highly political) "scientification" and "biologizing" of psychology (e.g., see Slife & Williams, 1997; Teo, 2005; Ward, 2002) that is characteristic, for example, of the American Psychological Association (APA), Friedman (2002, 2013a) sees psychology more as a natural science (like biology, chemistry, and physics) than a social or human science (like anthropology or sociology). In my view, psychology's focus on socially situated, biologically mediated, and arguably spiritually informed behavior and experience makes the discipline a natural, human, social, and spiritual science—a highly integrative field calling for a plurality of epistemic frameworks and methodological approaches beyond the exclusive scientific empiricism of the natural sciences (cf. Giorgi, 1970; Heron, 1998; Polkinghorne, 1983; Slife & Williams, 1997).
- <sup>19</sup> For Dupré (1993, 2004), there are not two or one grand cultures but a multiplicity of overlapping subcultures of inquiry—or "epistemic cultures," in Knorr Cettina's (1999) terms—that may (or may not) share epistemic virtues (e.g., coherence, empirical accountability, elegance, simplicity) and normative virtues (e.g., critique of androcentric and ethnocentric biases). The debunking of the myth of the unity of science brought forth by this

conception of shared epistemic virtues paradoxically delivers "a kind of unity of knowledge" (Dupré, 1993, p. 243).

<sup>20</sup> Incidentally, Friedman (2013a) misapprehended the nature of my participatory proposal as building "silos that separate, abnegating the possibility of finding useful connections" (p. 303) among spiritual traditions that lead to "considering all transpersonal systems as incommensurate" (p. 303). In my work, however, I not only criticized constructivism's "myth of the framework," which might lead to such undesirable outcomes (Ferrer, 2000, 2002), but also argued that participatory pluralism allows and even encourages doctrinal, practical, and even entological hybridizations among traditions (Ferrer, 2010, 2012). Specifically arguing against the radical separateness of spiritual cosmologies that Friedman attributed to my work, I wrote:

My defense of many viable spiritual paths and goals does not preclude the possibility of equivalent or common elements among them. In other words, although the different mystical traditions enact and disclose different spiritual universes, two or more traditions may share certain elements in their paths and/or goals. (Ferrer, 2002, p. 148)

In addition, contra Friedman's (2013a) suggestion that my proposal leads to the uncritical appraisal of local understandings, a participatory epistemology provides ample resources for the criticism of religious traditions (e.g., Ferrer, 2002, 2008a, 2008b, 2011a; Ferrer & Sherman, 2008b). The participatory endorsement of "the diversity of all spiritual traditions as seen on their own terms" (Friedman, 2013a, p. 303) should be understood not as eschewing criticism, but rather as both avoiding reductionist distortions of such diversity (e.g., by perennialism) and affirming a potential plurality of equally holistic forms of spiritual enactions of self, relationships, and world (Ferrer, 2011b).

- <sup>21</sup> In this context, Wilber's (1996) postmetaphysical reduction of spiritual realms to the individual's interiors fails to bridge the gap (see Ferrer, 2011a; Hartelius & Ferrer, 2014).
- <sup>22</sup> Although its origins are uncertain, *astral doctor* is demonstrably an etic term and Indigenous peoples use different local terms to refer to such reportedly nonphysical entities. The Matsigenka of Southern Peru, for example, call their spirit allies *Sangariite*—those "elusive, luminous beings" that can be seen "under the influence of hallucinogens plants" (Shepard, 2014, p. 23).
- <sup>23</sup> However, Grof's (1988) reported transcultural access, in nonordinary states of consciousness, to both the imagery and the (esoteric, at times) meaning of spiritual symbols, rituals, and cosmologies belonging to specific religious worlds without participants' previous exposure to those symbols arguably challenges such naturalistic reading (see Ferrer, 2002; Ferrer & Sherman, 2008b).
- <sup>24</sup> For an historical account of the "naturalization" of hallucinations, see Berrios (2005). As Aleman and Larøi (2008) explained, "Increasingly, mystical visions and similar experiences were no longer seen as the communication of supernatural origin. Instead, natural explanations were advanced" (p. 14).
- <sup>25</sup> The "and/or" of this sentence is crucial, particularly in the context of spiritual inquiry. On the one hand, it may be plausible to consider intersubjective consensus as a central epistemic standard in the context of what I call, paraphrasing Kuhn (1970), a single tradition's "normal" spiritual inquiry. In other words, when spiritual practice is managed by a prevailing spiritual paradigm and something akin to a correspondence theory of truth is operative (e.g., between practitioners' insights and the tradition's mapped "stages of the path"). On the other hand, it should be obvious that intersubjective agreement is probably an inappropriate test not only among traditions (which bring forth different and often incompatible spiritual insights), but also in periods of "revolutionary" spiritual inquiry within one tradition, in which anomalies in relation to accepted doctrines arise and new paradigms of spiritual understanding are developed (e.g., it is likely that neither the Buddha's enlightenment nor the claims of the more radical Christian mystics could have been intersubjectively corroborated in their respective times and contexts). In the latter case, the search for more pragmatic avenues to legitimize spiritual knowledge claims becomes imperative (see Ferrer, 2002, 2011a, 2011b).
- <sup>26</sup> Similarly, Kripal (2014) recommended the following to students of comparative religion: "We also need to beware of projecting the western categories of the 'natural' and the 'supernatural' onto religious worldviews in which such divisions are simply not operable. We have suggested instead that you employ the category of the 'super natural'" (p. 172).
- <sup>27</sup>The use of entheogens as inquiry tools is justified by modern cognitive psychological studies (Shanon, 2002), transpersonal research proposals (Friedman, 2006; Roberts & Hruby, 2002), and Indigenous accounts of the power of entheogens to make subtle entities or phenomena visible (e.g., see Harner, 1973; Sheppard, 2014; Turner, 1992). Interestingly, despite receiving enthusiastic support from transpersonal psychologists for decades, Tart's (1972) state-specific scientific research program never took off. I strongly suspect that the problem was that accessing deep meditative states in a stable manner, let alone the various visionary realms mapped by religious traditions, can take an entire life of practice. Put bluntly, we have the maps and the vehicle but not the fuel. Given the widely documented access to spiritual states and realms entheogens provide (see, e.g., Grof, 1985; Merkur 1998; Shanon, 2002; Strassman, 2001), I suggest that Tart's program could be revitalized by the cautious but systematic use of entheogens as inquiry tools. Despite the current revival of governmentally sanctioned psychedelic research (Friedman, 2006; Roberts & Winkelman, 2013), the use of most entheogens in the United States is still illegal, so this proposal should be seen as strictly epistemological and by no means recommending unlawful research.

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