

Journal of Philosophy and Culture,
Volume 5. No. 1, March 2014

**How to Talk about Physical Reality? Other Models,
Other Questions**

By

Benjamin B. Olshin, Ph.D

E-mail: bolshin@uarts.edu

School of Design, University of the Arts, Philadelphia,
Pennsylvania, 19102 U.S.A

Abstract

Investigating the nature of our apparent physical reality is a profound challenge. Our models from physics, while powerful, do not treat reality *per se*. The famous painter Paul Gauguin articulated the relevant existential questions famously in a grand painting - questions that also give the painting its title: *D'où venons-nous? Que sommes-nous? Où allons-nous?* People of religious faith, of course, assume that one can know the ultimate truth of reality, and, then, know the answers to these questions. But even in such a case, there is the issue of how a believer has obtained their faith, through a revelatory or other epistemological process. Joseph Campbell grasped the difficulty of framing the key questions, noting that, "the transcendent is unknowable and unknown. God is transcendent, finally, of anything like the name 'God.' God is beyond names and forms." This metaphysical puzzle concern, in part, models. Physics uses models, and such models are powerful tools: they allow us to navigate through the physical reality we live in, and manipulate aspects of it. However, the models do not

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

lead humanity closer to any ultimate truth, or even give us a clue that there might *be* an ultimate truth. The problem of using models and talking about reality can be viewed in a new way however, using certain structures in Chinese philosophy. The ancient *Dao De Jing* states: “The heavens and the earth are not partial to institutionalized morality”. We can extend that to say, “The universe is not partial to institutionalized models”.

Keywords: Reality, transcendent, humanity, morality

Introduction

What we take as reality is a slippery thing indeed. We could be unknowingly participating in a programmed simulation, and our models from physics, while powerful, are not going to ever talk about reality *per se*. We are left with the existential questions famously articulated in Paul Gauguin’s painting (see fig. 1), questions which also give the painting its title:

D’où venons-nous?

Que sommes-nous?

Où allons-nous?

“Where do we come from? What are we? Where are we going?” Those who possess religious faith, of course, assume that one can know the ultimate truth of reality, and thus the answers to these questions. But of course even then there is the issue of how one has obtained such faith, in terms of revelatory or other epistemological

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

processes.¹ Joseph Campbell expresses the difficulty of framing the key questions, noting that “the transcendent is unknowable and unknown. God is transcendent, finally, of anything like the name ‘God.’ God is beyond names and forms.”² He goes on to say:

The mystery of life is beyond all human conception. Everything we know is within the terminology of the concepts of being and not being, many and single, true and untrue. We always think in terms of opposites. But God, the ultimate, is beyond the pairs of opposites... Now, eternity is beyond all categories of thought. This is an important point in all of the great Oriental religions. We want to think about God. God is a thought. God is a name. God is an idea. But its reference is to something that transcends all thinking. The ultimate mystery of being is beyond all categories of thought.³

¹ The scholar James P. Carse has examined the question of religious faith and knowledge in his book, *The Religious Case Against Belief* (New York: Penguin Press, 2008). His primary point is that there needs to be a distinction between religion and belief, with the former being defined by Carse as a path of thoughtful reflection and inquiry, and the latter being described as closed-minded doctrine that is against the possibility of new knowledge or understanding.

² Joseph Campbell with Bill Moyers, *The Power of Myth* (New York: Anchor Books, 1991), 56.

³ *Ibid.*, 57.

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

Eternity is indeed beyond all categories, as Campbell notes here. But is there a way that we can move away from the language of categories so common in Western thought? Is there another way to talk about physical reality?

In this paper, we will look at those questions from a philosophy of science perspective using certain structures in Chinese philosophy as an introduction. One of our goals here is to discuss the kind of complex metaphysical puzzle — the nature of physical reality — that Gaugin poses, but using relatively plain language. Too often, examination of these profound existential mysteries becomes simply an exercise in twisting language around, language talking about itself.⁴ Here, we aim to take a new approach by examining the issue of models of physical reality. With a nod to Gaugin, we begin by posing some questions of our own:

1. Is it possible to talk about the fundamental nature of physical reality in any meaningful way?
2. Is there, in fact, an ultimate truth about such a reality?
3. Is there, in fact, a particular role for us in this reality? Or are we just a by-product of it?

The first question is an interesting one — and is

⁴ The author Douglas Hofstadter has addressed some of these linguistic traps in his well-known book *Gödel, Escher, Bach: An Eternal Golden Braid* and more recently in *I am a Strange Loop*.

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

necessary to clear up a common misunderstanding. Science never really talks about physical reality in an explicit way: its role is to make observations of phenomena and create *models*. Then it talks about the models, with atoms, quarks, strings, dimensions, and so on, as the components of those models. These components get moved around, defined and re-defined, and manipulated mathematically. The models allow scientists to predict other phenomena — for example, the existence of the Higgs boson.

The Question of Models

These models are powerful tools, and they allow us to navigate through the physical reality we live in, and manipulate aspects of it — we can build super-colliders, carry out sophisticated surgery, map out the evolutionary process in the natural world, and so on. But the models do not lead us closer to any ultimate truth, or even give us a clue that there might *be* an ultimate truth. The institution of science is not in the business of truth.

As soon as the term “physical reality” is brought up, we tend to think of something on a vast scale. We tend to consider “physical reality” — the vast universe and all that is in it — as “big”, and “us” as “small”, but even such a fundamental conception is actually just a model. Ideas of “big” and “small” are *our* conceptions, not those of the physical universe. One translator renders a line in the famous Chinese philosophical work, the *Dao De Jing*, this way: “The heavens and the earth

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

are not partial to institutionalized morality”.⁵ We can extend that to say, “The universe is not partial to institutionalized models”.

Human models tend to be visual, and work on the basis of very concrete depictions, even when we claim to talk about transcendental “configurations” beyond our common physical senses and reason. These visual-biased models that we tend to use include those of “levels”, concentric rings, configurations of “inner” and “outer”, wholes made of component parts (such as atoms), substrates (such as “quantum foam”), and so on.

Even our most grand religious approaches, one might argue, use rather mundane models: anthropomorphic deities, the “energy” emanations of the Cabbalists, and so on. Even as profound a thinker as Plato, in his famous “Allegory of the Cave”, uses a very visual layout to model the various states of human ignorance and the path to knowledge. Similarly, in Edwin Abbott’s *Flatland*, the explorations of a world beyond the visible one is laid out in a highly visual format — from two dimensions to three, an existing world and one “above” that.⁶

It is perhaps rather surprising, in fact, that if we go back to some earlier cultures we find that their descriptions of the universe are also highly visual. We

⁵ Roger T. Ames and David Hall, trans., *Dao De Jing: A Philosophical Translation* (New York: Ballantine Books, 2003), 84.

⁶ Edwin A. Abbott, *Flatland: A Romance of Many Dimensions* (Boston: Little, Brown, and Company, 1899).

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

might think that these earlier cultures — being more intuitive and less structured than our own — would have far more esoteric and imaginative models, ones that would break away from the “levels” and layers mentioned above. But in fact their models of physical reality, and the realms beyond, are portrayed in strict geometrical configurations, much as ours are. In the late fifteenth-century *Nuremberg Chronicle*, for example, we find not only the physical universe neatly laid out in concentric orbits (a carry-over from Ptolemy), but even the transcendent realm with “prime mover”, the hierarchical rows of cherubim and seraphim, and even God himself in a visual model (see fig.2). This tendency to describe all of physical reality, as well as any transcendent realm, in locative terms of “inner” and “outer” is not restricted to Western thought. Even ancient Tibetan Buddhism has a model of the universe that is carefully structured in spatial terms, with many different layers and hierarchies. The *mandalas* include everything from this earthly realm all the way up to the vast heavenly realm.⁷ There are concentric circles of land and water, centered on the massive mythical “Mt. Meru” (see fig. 3).⁸

⁷ See the extensive discussion in Martin Brauen, *The Mandala: Sacred Circle in Tibetan Buddhism* (Boston: Shambala, 1997), as well as Eric Huntington, *Portrait of a Landscape: Depictions of the Meru Cosmos in Buddhist Art and Culture* (University of Chicago dissertation, 2013).

⁸ See L. Austine Waddell, *The Buddhism of Tibet or Lamaism...*

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

In historical terms, there has even been a kind of acceleration towards a visual, locative model in describing the world. As the famous scholar Walter J. Ong notes, from the Renaissance onwards there has been a:

drive toward thinking not only of the universe but also of thought itself in terms of spatial models apprehended by sight. In this context, the notion of knowledge as word, and the personalist orientation of cognition and the universe which this notion implies, is due to atrophy. Dialogue itself will drop more than ever out of dialectic. Persons, who alone speak (and in whom alone knowledge and science exist), will be eclipsed insofar as the world is thought of as an assemblage of the sort of things which vision apprehends — objects or surfaces.⁹

(London: W. H. Allen & Co., 1895), 77 et ff.

⁹ Walter J. Ong, *Ramus, Method, and the Decay of Dialogue: from the Art of Discourse to the Art of Reason* (Chicago: University of Chicago Press, 2004), 9. See the comments in Timothy J. Reiss, *Knowledge, Discovery, and Imagination in Early Modern Europe: The Rise of Aesthetic Rationalism* (Cambridge: Cambridge University Press, 1997), 101-108, and note Stephen Ferguson, *Knowing Through Seeing: Diagrams, Schemata, and Tableaux in Early Printed Books, Medieval Manuscripts, and Prints* (Princeton: Princeton University Library Department of Rare Books and Special Collections, 1987), 1.

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

This theme of a transition to visual models in Western thought is something, in fact, that Ong commented on in a number of writings. In an essay on the “world views” of different cultures, he notes that “technologized man” tends to think in terms that are “essentially picturable and “to think of knowledge itself by analogy with visual activity to the exclusion... of the other senses”. By comparison, Ong says, oral cultures consider their world in “auditory terms”.¹⁰ Again, however, this triumph of the visual came long before the Renaissance.

However, early on in human thought there was also the realization that this emphasis on the visual, the spatialization of our existence, might be preventing greater or more profound understanding. The *Dao De Jing*, perhaps, comes closest to an honest assessment of such models and descriptions when it says, “Way-making (*dao*) that can be put into words is not really way-making”.¹¹ While the *Dao De Jing* uses all kinds of visual metaphors — including a bellows, the hub of a wagon wheel, a valley, and so on — it carefully avoids ever constructing a visual model of reality itself.

Even when we consent that, yes, we are only *modeling* aspects of physical reality, we nonetheless tacitly accept that models are somehow valid entities, and we do this sometimes simply by “prefixing” terms like “ineffable” to our model: “We can never know the

¹⁰ See p.634 of Ong, “World as View and World as Event,” *American Anthropologist* 71.4 (1969): 634-647.

¹¹ Ames and Hall, 77.

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

ineffable nature of existence...” In this case, we are using “ineffable” to validate the unsubstantiated idea that there is indeed something called “existence” and that it has a particular “nature”.

Language itself, of course, can be seen as another form of modeling. Again, as the *Dao De Jing* says, “...naming (*ming*) that can assign fixed references to things is not really naming”.¹² Indeed, in returning to the questions posed by Gaugin — *D’où venons-nous? Que sommes-nous? Où allons-nous?* — we can see that they all operate from a very particular model, one that assumes a number of “fixed references”. There is the assumption that there is a *nous* (a “we”), a past (“Where do we come from?”), a future (“Where are we going?”), and so on.

All these models and analogies and their assumed validity or applicability in the end may be valid and applicable only within a given framework that we ourselves have constructed. Modeling, and the use of language in the form of analogies, metaphors, or even “explanations”, may not have any *real* universal qualities at all. Of course, if we argue that such models are problematic, we push away science. If we reject language, that pushes much of philosophy out of the picture as well. But we are getting ahead of ourselves...

¹² *Ibid.*, 77.

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

The Problem with Modeling

First, as we grope around for other ways of talking about physical reality and our place in it, we might consider the common structures in our current models. As we have already noted, those models tend to be visual, and tend to utilize the concepts of scale, levels, and layers. Most models, too — from the structures of contemporary physics to the belief system of the Catholic Church — tend to divide the world into the tangible and intangible, the “higher order” and “lower order”, and so on.

A quick look again at Daoism, particularly as articulated in the *Dao De Jing*, gives us one notable departure from the typical hierarchical models. In this work, there is something called *dao*, which some have tried to render as a Western-style “substrate” or transcendent, Platonic form. But in the *Dao De Jing*, the model presented is: “all is one, and one is all” — all phenomena, all objects, even all perception arises and falls as the *dao*. We are the *dao*, the *dao* is us. But the *dao* is not a “thing”, or even an intangible entity: the *dao* is no more than the sum of all of our relationships.

As two scholars of Chinese philosophy, Roger T. Ames and David Hall, note in an introduction to their translation of the *Dao De Jing*:

As a parody on Parmenides, who claimed that “only Being is,” we might say that for the Daoist, “only *beings* are,” or taking one step further in underscoring the reality of the process of change itself,

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

“only *becomings* are.” That is, the Daoist does not posit the existence of some permanent reality behind appearances, some unchanging substratum...¹³

In such a model, there is no point in trying to talk about physical reality, since the physical reality is really no more than our mutual creation. We can only tug at the strings that connect us in the network that comprises this physical reality, this *dao*.

Ames and Hall have developed a somewhat abstract way of talking about this model, using the terms “focus and field”.¹⁴ Their primary point is that individuals, phenomena, and so on, in the Chinese models are “foci” arising from or becoming manifest out of a “field”, a model somewhat akin to physicist David Bohm’s Eastern-influenced conception of the “implicate” and “explicate” orders.¹⁵ In a discussion of the Chinese concept of *qi* or life energy in their book, *Focusing the Familiar: A Translation and Philosophical Interpretation of the Zhongyong*, Ames and Hall put it this way:

There is no external vantage point outside the flow of *qi*. The world is necessarily

¹³ Ibid., 13-14.

¹⁴ For an extensive discussion of this “focus / field” concept, see Roger T. Ames and David Hall, *Thinking Through Confucius* (Albany: SUNY Press, 1987).

¹⁵ See David Bohm, *Wholeness and the Implicate Order* (London: Routledge & Kegan Paul, 1981).

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

entertained from some particular perspective from which this particular field of *qi* is construed. Further, each particular perspective is holographic in the sense that it contains within its own intensive focus the entire extensive field.¹⁶

Specifically, in comparing the Western idea of a substrate or “bottom layer” to the Chinese idea of *qi*, we see the lack of hierarchy in the latter. The Chinese view of *qi* is not really as a substrate; rather it simply *is*. As another writer puts it:

The Chinese sense of self... is an emergent being (one that is because of what it *does*) from the context from which it surfaces. Any individual is a focus of overlapping vital energizing fields of *qi* that are interdependently related. In other words, the Chinese sense of self is more an event, an aggregated experience, than it is a disparate being standing outside its field of participation.¹⁷

Again, in the Chinese model, there is no separate individual person, object, or phenomena, nor is there a

¹⁶ Roger T. Ames and David Hall, *Focusing the Familiar: A Translation and Philosophical Interpretation of the Zhongyong* (Honolulu: University of Hawai'i Press, 2001), 25.

¹⁷ Göktug Morçöl, ed., *Handbook of Decision Making* (Boca Raton: CRC/Taylor & Francis, 2007), 274.

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

“start” and “end”, a creation or destruction.

In Western philosophy, one finds conjectures in this direction in the Existentialist concept of things simply always being, with no “first cause”, no beginning, and no end. However, even this still leaves present the conundrum of the existence of a physical reality, and the apparent existence of us in it. Chinese philosophy offers a kind of “middle road” — it acknowledges that things seem to be created, but it does not articulate either a “first cause” or a creator. The Neo-Confucian thinker Zhu Xi spoke of *yi*, meaning “change”, as *ziran zaohua* — which can be translated as “spontaneous creative transformation”.¹⁸ This kind of “spontaneity” echoes some contemporary models in physics, particularly quantum theory and the idea of “emergence”, where phenomena “spontaneously” arise.¹⁹

We find a related idea, although presented in a more subtle form, in the early Chinese philosophical work known as the *Zhuangzi*:

Tzu-ch’i said, “The Great Clod belches out breath and its name is wind. So long as it doesn’t come forth, nothing happens. But when it does, then ten thousand

¹⁸ Yung Sik Kim, *The Natural Philosophy of Chu Hsi (1130-1200)*, (Philadelphia: American Philosophical Society, 2000), 78.

¹⁹ See, for example, the discussion of the ideas of Stanford University physicist Robert B. Laughlin in *New Scientist* 2329 (9 February 2002): 24-27, and his book, *A Different Universe* (New York: Basic Books, 2005).

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

hollows begin crying wildly. Can't you hear them, long drawn out? In the mountain forests that lash and sway, there are huge trees a hundred spans around with hollows and openings like noses, like mouths, like ears, like jugs, like cups, like mortars, like rifts, like ruts. They roar like waves, whistle like arrows, screech, gasp, cry, wail, moan, and howl, those in the lead calling out *yeee!*, those behind calling out *yuuu!* In a gentle breeze they answer faintly, but in a full gale the chorus is gigantic. And when the fierce wind has passed on, then all the hollows are empty again. Have you never seen the tossing and trembling that goes on?"

Tzu-yu said, "By the piping of earth, then, you mean simply [the sound of] these hollows, and by the piping of man [the sound of] flutes and whistles. But may I ask about the piping of Heaven?"

Tzu-ch'i said, "Blowing on the ten thousand things in a different way, so that each can be itself — all take what they want for themselves, but who does the sounding?"²⁰

²⁰ Burton Watson, trans., *Chuang Tzu: Basic Writings* (New York:

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

The breath and wind here is, literally and figuratively, *qi*. The passage starts with a description of how this *qi*, becomes manifest — or explicate — with trees, forests, etc., simply serving as vehicles to allow this “explication” to happen. Then the question is raised of the “piping of Heaven” — a question about the *qi* itself having some sound, and the related possibility of one experiencing directly that sound or the implicate order it represents. In answer to this, Tzu-ch’i responds, “[W]ho does the sounding?”, and of course the answer is *no one* — it is all spontaneously arising, and the trees, forests, and so on are merely the articulating channels.

In a way, this Eastern model is quite satisfying: no more conjecturing about the “mind of God”, about the will or plan of a creator, or about some time called “t = 0” when everything started. Moreover, having all things — in Chinese, the term for “everything” is *wanwu*, literally “the ten thousand things” — arise from their relationships with all other things eliminates the need to talk about individual components or particulate parts. Essentially, in this model, there are no things, nor individuals. Even persons are just composites, comprising all their relationships and mutual perceptions by oneself and others. Again, there are no Platonic “Forms”, no God making man in His image, no one object or person having primacy.

This is a very holistic model of talking about reality, and one that Western philosophy has focused on

Columbia University Press, 1964), 31-32.

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

more intensively recently, perhaps due to the increasingly ill fit between physics and philosophy. Western science, as we have noted, builds models while philosophy (especially metaphysics) seeks to make broader statements about the physical reality and our place in it. Science, in seeking “final theories” — e.g., the “Grand Unified Theory” — is treading into the realm of metaphysics, and hence the ill fit. How is it treading into metaphysics? Because any claim on an ultimate model (physics would still be talking about models, of course) would be a rather metaphysical claim.

Rejecting this Western conundrum, some new philosophical examinations have put forward approaches that seem more in tune with Daoist conceptions. In a 2003 conference paper, “Stéphane Lupasco and Florentin Smarandache: Conflicting Logics of Contradiction and an Included Middle”, Joseph E. Brenner discusses the ideas of the Romanian philosopher Stéphane Lupasco, and the extrapolation of one of Lupasco’s particular concepts — the “logic of the included middle” — by the physicist Basarab Nicolescu. As Brenner puts it:

In this logic of existence, every phenomenon is accompanied by its contradictory one, such that no ideal, abstract identity is possible, and the classical values of truth and falsity are replaced by the reciprocally determined values of the actualization and

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

potentialization of the phenomena themselves.²¹

These “reciprocally determined values” are exactly what we find in the *Dao De Jing*, where all things are defined by relationships or by their opposites, and where there are indeed no absolute “classical values”.

An Alternative Approach

This new way of looking at the physical reality and our place in it is quite puzzling at first. It seems to strip us of individual identities — we are simply composites of our relationships and experiences. Moreover, it apparently leaves us without reference points for tangible objects, personal identity, or ethical conduct. We are left with the idea that “everything is relationship”.²² It almost seems as if we are caught in — actually, composed of — some kind of huge “spider-web” of connectivity, able only to pull on the strands in our immediate vicinity. We might illustrate this schematically, where the small, gray circles illustrate what would call individual identities (see fig.

²¹ Joseph E. Brenner, “Stephane Lupasco and Florentin Smarandache: Conflicting Logics of Contradiction and an Included Middle”, at *Applications of Plausible, Paradoxical, and Neutrosophical Reasoning for Information Fusion (The Sixth International Conference on Information Fusion)* (8-11 July 2003), Cairns, Queensland, Australia,
<<http://atlas-conferences.com/c/a/j/x/10.htm>>

²² This concept was not always confined to Chinese thinking; Pythagoras held a similar concept, although he might also be read as a transcendentalist.

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

4). In fact, those identities are only “points of meeting”, formed by the existence of the web or network itself.

Ames and Hall, cited earlier, see this model as empowering; they view it as allowing us to create the world around us, since that world — that physical reality — is no more than the sum of our relationships and actions. The physicist David Bohm, mentioned earlier, was very interested in this kind of creative process, too, and there are some interesting similarities between his thinking and the ideas of Ames and Hall. In their book *Focusing the Familiar: A Translation and Philosophical Interpretation of the Zhongyong*, they translate the Chinese character *cheng* (see fig. 5) in an interesting way. This character — which is typically rendered as “sincerity” — they translate as “creativity”:²³

In a world characterized by the ubiquitous interactions of continuous process and events... there is no basis for appealing to the notion of efficient causality as an explanatory model.²⁴

Creativity in its fullest sense is... a goal of self-actualizing behaviors.²⁵

²³ David Bohm, *On Creativity* (London: Routledge, 1998); Roger T. Ames and David L. Hall, *Focusing the Familiar: A Translation and Philosophical Interpretation of the Zhongyong* (Honolulu: University of Hawai'i Press, 2001).

²⁴ Ames and Hall, 11; also see idem, *Dao De Jing: A Philosophical Translation*, 16-17.

²⁵ Ibid., 14.

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

Bohm puts it this way:

[B]y creativity, one means... the inception of new content, which unfolds into a sequence of moments that is not completely derivable from what came earlier...²⁶

In other words, creativity is not just pulling something new out of thin air — which Bohm’s distinguishes as “fancy” rather than creativity — but rather something that “arises”, much as a living thing arises from its environment. At one point, the *Zhongyong* states:

Exemplary persons... revise the old in order to realize the new, and with real solemnity celebrate the rites and ceremonies.²⁷

Bohm speaks in a similar fashion of creative thinking among scientists:

It might... be said that one who is similar to Einstein in creativity is not the one who imitates Einstein’s ideas, nor even the one who applies these ideas in new ways; rather, it is the one who learns from Einstein and then goes on to do something... which is able to assimilate what is valid in Einstein’s work and yet

²⁶ Bohm, *Wholeness and the Implicate Order*, 269.

²⁷ Ames and Hall, 37.

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

goes beyond...²⁸

For Bohm, the rites and ceremonies or rituals — the term *li* in Chinese — would be the creative foundations laid down by the “sage-like” Einstein. Indeed, Bohm notes that:

Einstein saw that questions having to do with space and time and the particle nature of matter, as commonly accepted in the physics of his day, involved confused presuppositions that had to be dropped, and thus he was able to come to ask new questions leading to radically different notions on the subject.²⁹

Einstein might be seen as a kind of Daoist sage, whose primary concern in physics was about what were the most appropriate questions to ask!

As we are talking here about models of physical reality —indeed the *cosmos* — it is interesting to see Daoism’s lack of an explicit cosmology:

In early Greek philosophy, the term “kosmos” connotes a clustered range of meanings, including *arche* (originative, material, and efficient cause/ultimate undemonstrable principle), *logos* (underlying organizational principle), *theoria* (contemplation), *nomos* (law), *theios* (divinity), *nous* (intelligibility). In

²⁸ Bohm, *Wholeness and the Implicate Order*, 31.

²⁹ *Ibid.*, 36.

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

combination, this cluster of terms conjures forth some notion of a single-ordered Divine physical reality governed by natural and moral laws that are ultimately intelligible to the human mind... The Daoist understanding of “cosmos” as the “ten thousand things” means that, in effect, the Daoists have no concept of cosmos at all insofar as that notion entails a coherent, single-ordered world which is any sense enclosed or defined. The Daoists are, therefore, primarily “acosmotic” thinkers.³⁰

One could show at length how the Western investigatory method, no matter how objective and “scientific”, still operates within that ancient Greek paradigm: that there is some *arche* behind the observed physical reality, an *arche* that follows mathematical principles and that could be revealed in a “Grand Unified Theory”. Indeed, one might argue that this Greek model led to the development (perhaps unconsciously) of all Western science, particularly with its language of “theories” and “laws”.

This model of a “single-ordered... physical reality” is deeply embedded in our thinking. Even the most alternative, “New Age”, concepts are structured around a quest for some kind of “higher” order, or an “order beyond this one”. The U.S. has been the

³⁰ Ames and Hall, *Dao De Jing: A Philosophical Translation*, 14.

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

birthplace of the “New Age” phenomenon of an Americanized Daoism, which sees the *dao* as some kind of actual path, a kind of “Platonic Form” that might serve as the ultimate referent.³¹ But of course the whole point in Daoist thought is that *there is no referent*.

Consequences of the Alternative Approach

But what are the real consequences of the acceptance of this Daoist model? If there is no external creator, no “first cause”, and no *arche*, then what is causing the phenomena we apparently perceive? Is it *us*? Ames and Hall note:

One implication of this distinction between a “cosmotic” and “acosmotic” worldview is that, in the absence of some overarching *arche* or “beginning” as an explanation of the creative process, and under conditions which are thus “an-archic” in the philosophic sense of this term, although the “nature” of something might indeed refer to “kinds,” such “natural kinds” would be no more than generalizations made by analogizing among similar phenomena. That is, difference is prior to identifiable

³¹ For an interesting discussion of this, and a critique of Ames and Hall, see John James Clarke, *The Tao of the West: Western Transformations of Taoist Thought* (London: Routledge, 2000), 164.

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

similarities.³²

One consequence of this very different approach concerns the investigation of the world around us — or, more precisely, the lack of any point in investigating. In this Daoist model, one could observe phenomena, and perhaps even carry about experiments, but there would be no reductionism to find causes — there would only be the forming of analogies. This is a strange kind of science, but it is exactly what one finds in Chinese traditional medicine. In that system, diseases are diagnosed, but there is essentially no concept of an external disease-causing agent “entering” a body. The body, the external physical reality — all are analogous. Just as the *yin* and *yang* of the physical reality might be out of balance, so can the *yin* and *yang* of the body. Treatment is through re-creating balance in the body, putting it back in context of the whole physical reality. That is quite different from the Western idea of a body as something separate in space and time from its environment.

In Chinese traditional medicine, one can theorize, but really all diagnosis is about finding where an imbalance might be and how to remedy it. There is no reductionism of the kind that one finds in Western medicine — no search for a virus, bacteria, prion, etc. Traditional herbal medicines in the Chinese system are classed according to the overarching categories of *yin* and *yang* in the form of the sub-categories of “hot”,

³² Ames and Hall, *Dao De Jing: A Philosophical Translation*, 14.

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

“cold”, “wet”, “dry”, etc. In Chinese thought, these analogously match the factors of bodily functioning with the composition of the entire physical reality, since it, too, functions according to similar *yin* and *yang* principles.

Again, the ability to use such an approach to investigate phenomena in a Western empirical context is very limited:

Given that things and events are invariably entertained from some perspective or other, they are always unique. And the radical temporality of experience that will neither be arrested nor denied guarantees that all attempts to theorize about these events, while often of contingent value, will ultimately be outrun by the processive character of experience.³³

So, in the Chinese system, one can make provisional comments, but very few definitive statements about “truth”. Certainly, science in the West is similar in the sense that all theories are provisional, but here in the Daoist model we see that even theory-formation may be impossible. It is as if the physical laws or constants of the physical reality — if there are any — are in constant flux. The Chinese seem to accept the “laws” or “constants” of the *yin* and the *yang*, but these are so fluid in their definition that they end up serving in quite a

³³ Ibid., 78.

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

different role from the laws and constants in Western physics.

But as noted earlier, for the Daoists not only is “reality” so slippery that one cannot theorize about it, in fact it doesn’t exist at all — except as we make it:

The human being is not passive in this continuing process. On the contrary, the human imagination is itself the clearest example of naming without assigning fixed reference. Our thoughts and language are not tied to a world, but function to actively articulate and realize one. In Daoism, there is no appeal to a static vision of a reality or a mind that passively mirrors it. It offers rather a wholly transactional relationship between a world-making heart-and-mind and a heart-and-mind-shaping world. In this process, we tap the indeterminate aspect of our experience to think and speak a novel world into being.³⁴

Therefore, if we were to graft this Daoist approach on to Western empiricism, we might be left with the idea that what we observe as physical phenomena are actually extensions of our consciousness. This concept was examined by David Bohm, mentioned earlier, and by the neuroscientist Karl Pribram, but unfortunately does play

³⁴ Ibid., 78-79.

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

a role in mainstream physics today.³⁵

Other Questions

The Daoist view as expressed in the *Dao De Jing* and parts of the *Zhuangzi* can be seen as a network or web, but one with nothing at the nodes. Indeed, the nodes are only the *result* of their identity as connections — the nodes have no other identity. This seems to be a view that provides for no “real” objects or independent phenomena whatsoever. It is something from nothing, although even that “nothing” is not dealt with directly. In the *Dao De Jing*, we find a number of allusions to emptiness as one of the few appropriate approaches to actually talking about the *dao*; in Chapter 5 we have:

Isn't it just like a bellows!

Even though empty it is not vacuous.

Pump it and more comes out.³⁶

In Chapter 11, the *Dao De Jing* emphasizes not only this “emptiness”, but also that this is where the value is to be found:

The thirty spokes converge at one hub,

But the utility of the cart is a function of the nothingness (*wu*) inside the hub,

We throw clay to shape a pot,

But the utility of the clay pot is a function of the

³⁵ For one discussion of this idea, see Henry P. Stapp, *Mindful Universe: Quantum Mechanics and the Participating Observer* (Berlin: Springer Verlag, 2007).

³⁶ Ames and Hall, *Dao De Jing: A Philosophical Translation*, 84.

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

nothingness inside it.

We bore out doors and windows to make a dwelling,

But the utility of the dwelling is a function of the nothingness inside it.

Thus, it might be something (*you*) that provides value,

But it is nothing that provides the utility.

In their commentary on this passage, Ames and Hall note:

The Chinese existential verb *you* 有 overlaps with the sense of “having”... and therefore means “to be present” or “to be around.” *Wu* 無 then — here translated as “nothing” — means “to not be present” or “to not be around.” *Wu* does not indicate strict opposition or contradiction, but absence. Thus, the *you-wu* distinction suggests mere contrast in the sense of the presence or absence of *x* rather than an assertion about the existence or non-existence of *x*.

This focus on *wu* — essentially, “nothingness” — and the lack of any assertions about existence of an entity, make this worldview distinctly different from the Western scientific approach. In the Western model, determination of what exists and what doesn’t is a key process in the empirical method. If we are witness to observational phenomena, then according to the

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

scientific approach, something must exist to create those phenomena. Perhaps it is those “strings” of contemporary physics, and if we say that such strings *exist*, we must determine what it is that allows them to exist... and so on. Empiricism demands a process, and that process has to include the idea that things actually exist. If we start doubting the existence of things, we do not need any real exploratory process. We return then to the open, non-assertive Daoist philosophical view.

The Daoist view is holistic, clearly. But the world we actually seem to experience is one with individual identities and differences. So, if reality is simply this Daoist whole, who or what creates the *differences* we apparently observe around us?

This is but one of several questions we can pose; there also are more subtle ones. Even the *Dao De Jing* and the *Zhuangzi* seem to hint at some kind of “absolute”, even if that absolute is a kind of “nothingness”. Western theology and Platonic philosophy both have clear absolutes, of course. So, we are left to ponder:

1. Are there absolutes or just absolute beliefs?
2. If we succeed in determining that there are indeed absolutes, can we find them?
3. How do we start?

If there are just absolute beliefs, then we are back to the Daoist idea that what we perceive as “real” is really just a creation of our intellect, a phantasm — and that even our intellect has no real separate identity. Daoist

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

philosophy is fine, but it does not satisfy a Westerner's desire to employ an investigatory approach.

Above and Below, Inside and Outside

As noted earlier, when we try to talk about the “big picture”, our models of physical reality tend to be visual, and more specifically, prepositional. The models use words such as “above”, “beyond”, “beneath”, and so on when trying to speak about the supposed non-apparent realms lurking out there somewhere. In theological models, the prepositional and visual model is one of “above” and “below”, perhaps mimicking the readily observed earth and sky around us. In scientific thinking, we speak in terms of “levels”, or component parts such as sub-atomic particples, or substrates such as “strings”, and so on.

We might go so far as to say that this is a failing of human language: when we speak of metaphysics, we seem bound to visual, hierarchical models because of these prepositions. Consider the following typical statement: “There might be some kind of realm *beyond* this, *behind* this perceived reality.” Or: “There is human reality, the thoughts in our minds, and then *above* that, the Platonic forms.” Verbs used in metaphysical language also end up rendering visual models: “We can *transcend* this realm, we can *overcome*, and *push through* to the other side...” The problem is that any genuine metaphysical realms — “realms” being another insufficient word — cannot be “placed” through any

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

kind of prepositional geo-lexicography into some process towards answering the original questions posed by Gaugin.

In short, when we speak of metaphysics, when we try to talk about something other than or more profound than the everyday phenomena we observe, we use language — and language seems insufficient, or it seems to lead us exclusively to visual, locative constructs. In mysticism, supposedly only the language of God is sufficient to describe the “ultimate reality” of our physical world.³⁷ But what about human language, since an investigation into the concept of a “language of God” just brings up a host of other problems? Could human language alone lead us to more profound understanding?

The Argentine writer Jorge Luis Borges in his story, “The Library of Babel”, most famously explores this concept.³⁸ A metaphor for human existence, “The

³⁷ There are a myriad of works on this subject; one example trying to blend religion and empiricism is Francis S. Collins, *The Language of God: A Scientist Presents Evidence for Belief* (New York: Simon and Schuster, 2006). For an interesting examination of the intersection of this same idea of a “language of God” with mystical thought and visual modeling, see Joseph Burton, “Notes from Volume Zero: Louis Kahn and the Language of God”, *Perspecta* 20 (1983): 69-90.

³⁸ The English version of the story can be found in Jorge Luis Borges *Ficciones* (New York: Grove Press, 1962) and in

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

Library of Babel” explores the idea of attempting to find the secret of the physical reality *from within* — using something from *inside* the system, i.e., language, to explain something that seems *outside* the system, i.e., the mind of God, the meaning of existence, and so on. In the Borges story, the library contains every possible book that can be rendered with a standard alphabet. So, this library contains every text that could possibly be written, and thus also contains descriptions of everything that was, is, and could be, and, of course, the explanation of the very nature of the physical reality along with proofs — as well as every counter-explanation and disproof possible.

The story of the library, interestingly, is narrated *from the inside* by a librarian — the reader never really gets a “God’s-eye view” of this structure. The librarian recounts the search through the vast hexagonal rooms of books, and the frustrating nature of his search. That search, one akin to the questions posed by Gaugin, is described succinctly in the story:

The clarification of the basic mysteries of humanity — the origin of the Library and of time — was also expected. It is credible that those grave mysteries can be

Labyrinths: Selected Stories & Other Writings (New York: New Directions, 1964); the Spanish version is in idem, in *Obras completas 1923-1972* (Buenos Aires: Editorial Emecé, 1974), and was originally published in the collection *El jardín de senderos que se bifurcan* (Buenos Aires: Sur, 1941).

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

explained in words: If the language of the philosophers does not suffice, the multiform Library will have produced the unexpected language required and the necessary vocabularies and grammars for this language.³⁹

But the search is still a mighty challenge, of course, since there is no way for one to verify that they have found the *right* language, the *true* vocabulary of grammar of creation and time. The story also presents another possibility:

In some shelf of some hexagon, men reasoned, there must exist a book which is the cipher and perfect compendium to *all the rest*: some librarian has perused it, and it is analogous to a god. Vestiges of the worship of that remote functionary still persist in the language of this zone. Many pilgrimages have sought Him out. For a century they trod the most diverse routes in vain. How to locate the secret hexagon which harbored it?⁴⁰

However, the narrator dismisses such a possibility, and notes: “I have squandered and consumed my years in adventures of this type.” Indeed, with this story Borges suggests that it may be impossible to explore or even talk

³⁹ Jorge Luis Borges, “The Library of Babel”, in *Ficciones* (New York: Grove Press, 1962), 84.

⁴⁰ *Ibid.*, 85.

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

sanely about the ultimate origin and meaning of physical reality from within that physical reality.

Alternatively, a Daoist would say that each and every one the books in the Library of Babel are both filled with meaning and totally devoid of meaning. A Daoist adept might therefore find the secret of existence in *any* volume he picked up at random. The meaning, he would argue, comes from our interaction with the book itself. But again, that would not satisfy the Western empiricist, who believes in a process towards “Truth”, or at least towards harder and harder evidence that there is a fundamental “Truth”. For the empiricist, the books — or at least one of them — have to *mean* something.

Away from the Prepositional

Language means a certain structure, and often it is one that is prepositional and hierarchical; therefore, in searching for a way to decipher reality, perhaps a move away from language is in order. The visual arts have long provided expressions for reality — and the potentially transcendent nature of reality. A beautiful example is the work of Lawren S. Harris (1885 - 1970), a Canadian painter who became interested in landscape painting as a way of achieving, as he put it, a “deeper and more universal expression”, and a way of grasping “universal qualities and... a universal vision and understanding”.⁴¹

⁴¹ Ann Davis, *The Logic of Ecstasy: Canadian Mystical Painting, 1920-1940* (Toronto: University of Toronto Press, 1992), 68.

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

Over the course of his life he became interested in mysticism, becoming involved in Theosophy and joining the International Theosophical Society.⁴² After moving to the U.S., Harris worked with Emil Bistram in Sante Fe, New Mexico, one of the founders of the Transcendental Group of Painters. Naturally, for Harris there was a confluence of the increasing abstraction in his art and his interest in universal mystical themes. The painter's search for a "deeper and more universal expression" led to a series of works in which mountains, icebergs, and other landscape elements became increasingly simplified, even streamlined to their fundamental forms (see fig. 6).

Harris' works strike the viewer as collections of iconic abstractions, attempts to render the Platonic ideals behind the observed mountains and landscapes.⁴³ From this perspective, one might say that a painting itself is a stand-in for a Platonic "Form". This is a key point: typically, a painting might be a *vehicle* for the viewer to

⁴² See Michael Stoeber, "Theosophical Influences on the Painting and Writing of Lawren Harris: Re-Imagining Theosophy through Canadian Art," *Toronto Journal of Theology* 28.1 (Spring 2012): 81-104.

⁴³ For further examples of Harris' paintings and more on the "Group of Seven" artists, see Charles C. Hill, *The Group of Seven: Art for a Nation*, National Gallery of Canada (Ottawa: National Gallery of Canada, 1995) and Ross King, *Defiant Spirits: The Modernist Revolution of the Group of Seven* (Vancouver: Douglas and McIntyre, 2010). Also see Héliane Ventura, *Études canadiennes / Canadian Studies* 62 (June 2007): 153-160.

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

have a transcendent experience — staring at a work in a museum, the viewer is transported, or at least inspired to ponder and reflect. But in Harris' case, and in abstract art generally, the painting or at least its content *is* the Platonic "Form" — the mountains, icebergs, and clouds perhaps are not representations at all but the actual "Forms", right there for the viewer to experience directly. That is, these landscape elements in the paintings are not intended to remind the viewer of, nor refer the viewer to, the "Forms". In fact, Harris also created paintings of pure abstraction (see fig. 7).

Again, even in Harris' landscape painting, the landscape elements there are not intended to remind the viewer of nor refer the viewer to the Platonic "Forms". Why is this an important distinction? First, it means engaging in art *as art*, not as metaphor — and thus the "hierarchy" of symbol to object can be flattened. Maybe this is a step towards a way of discussing physical reality with no need of levels, layers, or other spatial locations. Without doubt, Harris was wrestling with this question directly.⁴⁴

Conclusions

So, how should we talk about physical reality? That question itself may be part of the problem; the grammar used again is one of prepositions — it assumes that there

⁴⁴ See Fred F. Wilson, Jr., "Consciousness of Ultimate Reality in the Development of the Art of Lawren Harris," *Ultimate Reality and Meaning* 26.1 (2003): 22-48.

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

is a larger physical reality and *we* are *inside* it, and can talk about intelligently. We are using the old spatial, visual models again, with a conceptualization of an “inside” and an “outside”. Perhaps we should consider a totally different way of thinking about this, one where there is no separate “we” and “physical reality” — we might consider that they are all one. It would lead to a strange kind of science, certainly — no more “we” and “it”, no more subject observing and constructing theories and models about an object.

There have been movements in this direction, with discussions of the problematic role of the observer in quantum physics.⁴⁵ There are also other interesting approaches to looking at the connection between the observer and the apparently external observed physical reality. One such approach is that of digital physics and its concept of physical reality and everything in it as pure information.⁴⁶ Similarly, there is the concept that

⁴⁵ For a look at some of the issues in contemporary physics, see, for example, Lee Smolin, *The Trouble With Physics: The Rise of String Theory, the Fall of a Science, and What Comes Next* (Boston: Houghton Mifflin Co., 2006) and especially Bruce Rosenblum and Fred Kuttner, *Quantum Enigma: Physics Encounters Consciousness* (Oxford: Oxford University Press, 2006).

⁴⁶ For a brief look at an “information model” of physical reality, see Luciano Floridi, “Informational Realism”, in John Weckert. and Yeslam Al-Saggaf, eds., *Computers and Philosophy 2003 — Selected Papers from the Computer and Philosophy Conference (CAP 2003), ACS - Conferences in Research and Practice in Information Technology* (Australian Computer Society, 2004), 7-12; note the interesting mention of spatial analogies in Floridi’s

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

external physical reality — if it exists at all — is just noise that is then subjected to calculations, filtering, or other reductive processes by the brain to create the reality we perceive.⁴⁷

But we are saying more than that here: physical reality might very well *be* us, and our observations of subatomic particles and quantum fluctuations might actually be examinations of our own reflection. It is as if we think we see the image of an object rushing by in a mirrored storefront window, but really it is our own image — once we stop and look at it, we see that it moves as we move, that it is created and controlled by us. Perhaps we have “spun out” and woven physical reality from our own minds.

This indeed is a strange model, if we may use the term model here: one where physics suddenly becomes a subset, perhaps, of neuroscience and psychology. The ideas of Bohm, cited earlier, seem to hint at this, however. And perhaps certain conundrums of physics — such as “Where *is* the ‘bottom layer’ of the physical world, and what is the ‘fundamental particle’?” — can be approached in a productive way with this as philosophical model. For what do such conundrums tell us? Not that reality is problematic, but rather that our current models are wrong. This has been one proposed

conclusion.

⁴⁷ I would like to thank Paul Grobstein of Bryn Mawr College for articulating this idea to me in relation to the problem of physical reality.

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

solution to Zeno of Elea's paradoxes — that he was asking the wrong question, or at least posing it incorrectly⁴⁸ Similarly, perhaps, for the famous “grandfather paradox” of temporal physics, Gödel's incompleteness theorems, and so on? Perhaps these fundamental questions in physics can be addressed more fruitfully with a very, *very* different epistemological model indeed.

Figure Captions

Figure 1. Paul Gauguin, “D'où Venons Nous / Que Sommes Nous / Où Allons Nous” (oil on canvas, Museum of Fine Arts, Boston)

Figure 2. Page from the Nuremberg Chronicle showing the structure of the physical universe and beyond

Figure 3. “The Universe of the Lamas” with Mt. Meru at the center

Figure 4. A schematic representation of the idea that “everything is relationship”

Figure 5. The Chinese character *cheng*

Figure 6. Lawren S. Harris, “Pic Island, 1924” (oil on canvas, McMichael Canadian Art Collection)

Figure 7. Lawren Harris, “Abstract No.7, 1939” (oil on canvas, Vancouver Art Galle

⁴⁸ For a discussion of this, see the discussion of what is known as the “Standard Solution” to Zeno's paradoxes in Adolf Grünbaum, *Modern Science and Zeno's Paradoxes* (Wesleyan University Press: Middletown, Connecticut, 1967).

Journal of Philosophy and Culture, Volume 5. No. 1, March 2014

Figure 1. Paul Gauguin, “D’où Venons Nous / Que Sommes Nous / Où Allons Nous” (oil on canvas, Museum of Fine Arts, Boston Art Gallery)



Figure 2. Page from the Nuremberg Chronicle showing the structure of the physical universe and beyond



Figure 3. “The Universe of the Lamas” with Mt. Meru at the center

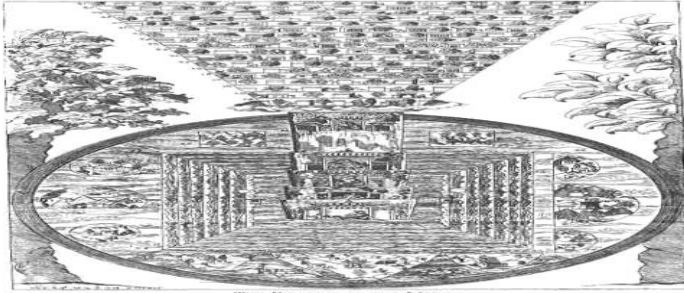


Figure 4. A schematic representation of the idea that “everything is relationship”

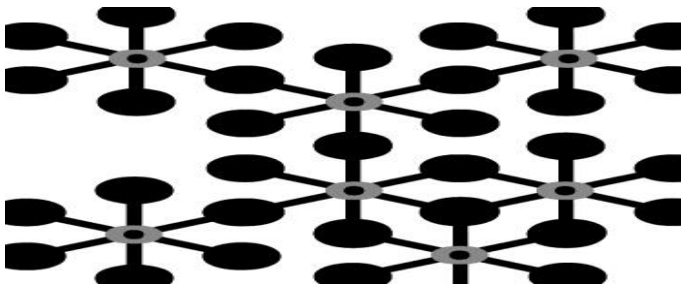


Figure 5. The Chinese character *cheng*



Figure 6. Lawren S. Harris, “Pic Island, 1924” (oil on canvas, McMichael Canadian Art Collection)



Figure 7. Lawren Harris, “Abstract No.7, 1939” (oil on canvas, Vancouver Art Gallery)

