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Knowing Art / Transcending
Science:
Perception, Consciousness,
Synchronicity and Transgnosis

Nature as described by our scientists is indeed an artifact built in collaboration with a Being sufficiently complex to mock and, perhaps, punish materialists by responding to them in a crudely materialistic way. – Paul Feyerabend¹

by Edward A. Shanken

The divisive nature of western epistemology's into oppositions (on/off; interior/exterior; good/bad) is no more disconcerting than science's disavowal of all phenomena that cannot logically and empirically be measured and replicated. From this perspective, if science cannot explain something, either that thing does not really exist, or it is not worth exploring because it cannot be studied. A science that can explain phenomena that are incommensurable with the scientific method will be, necessarily and by definition, substantively and paradigmatically different from the mainstream western model. It might be closer to art.

Due to the limitations of science, phenomena are systematically ignored or misconstrued as attention is focused on those that are amenable to the methods scientists have developed in order to make sense of empirical data. In his classic discussion of scientific revolutions, Thomas Kuhn argued that, because under certain circumstances nature was found to deviate from Newton's laws of physics, those laws began to buckle under the pressure of empirical counter-evidence. Eventually, Einstein's Theory of Relativity – which explained what Newton's laws explained, plus some behaviors Newton could not – became the new paradigm.¹ In other words, phenomena systematically have their proverbial toes cut off so they can fit one of the glass slippers of science, which periodically develop too many cracks and must be replaced by a new model. Pushing this line of reasoning a step further, one might suggest that science is getting to the point at which paradigmatic revisions will no longer suffice. As Jack Burnham suggested over four decades ago in *Beyond Modern Sculpture* (1968), the underlying philosophical assumptions of science itself are being called into question and a radical re-invention of what science fundamentally is could become a pressing matter, if not for the health of science, then for the health of the Earth. Replacing the glass slippers of science may no longer be viable because it is becoming glaringly obvious that phenomena do not behave like feet, particularly at nano- and endo-scales.

It appears that there are a range of phenomena, the size and importance of which can only be a matter of speculation, that resist rational, scientific explanation. While science may offer useful insights into them, it is not clear that it will be able to explain everything. The philosopher Paul Feyerabend quote that opened this essay suggests that the belief that science can explain everything is based on nothing more substan-

tial than idealism, hubris, and tradition.

Alternative ways of knowing that are not strictly rational, that accept multiplicity and embrace contradiction, may offer important insights into those areas that science has most difficulty explaining. Feyerabend proposed that science could benefit from the arts, whose subtle understanding and appreciation of paradox and absurdity, to say nothing of its embrace of artifice – literally, the constructedness of systems of knowledge and representation – might offer useful points of entry into what he called the “‘objective artifact’ *nature*.” Although the credibility of art as a system of knowledge has diminished over the last several centuries as the cultural capital of science has ascended, it must be noted that the line separating science from art and mysticism is blurry at best and is subject to constant renegotiation. Indeed, what is now known as parapsychology was accepted as a *bona-fide* area of scientific inquiry well into the 19th century.

With regard to understanding consciousness, the choice to subscribe to a rational, scientific, materialistic account can only be based on what amount to aesthetic considerations. One's preference for a particular method of understanding the world is not based on it being superior *a priori* to another method. One method is not right and another wrong. Each arguably has different domains of applicability and utility, and appeals more to some people than to others. That appeal is its only authority and such an appeal can only be understood as fundamentally aesthetic, a matter of taste. Similarly, the domain of aesthetics – and, in particular, the creation of artworks that activate and challenge our perceptions, or that demand a meta-critical awareness of perceptual processes, of consciousness itself – may offer profound insights into how we come to experience, know, and construct the world. The works in *Esemplasticism – The Truth is a Compromise* raise these sorts of issues. In the manner of Heinz von Foerster's radical constructivism, they provoke a heightened awareness of the ontological status of an observer as an embodied being systemically linked to the observed phenomena.³ This awareness has significant implications for our understanding of how knowledge is constructed and of what it consists of, demanding a rethinking of the epistemological underpinnings of art and science.

A Para-Rational Model

Within the discourses of the philosophy of mind, debate concerning consciousness is primarily confined to materialist explanations in which mind/consciousness (here used interchangeably) is interpreted to be an epiphenomenon of the material workings of a biological organ.

According to this reasoning, the brain, simply by its physical nature, gives rise to the human experience of awareness known as consciousness. The mind-brain problem that makes materialist philosophers so uneasy is a false dualism, for the mind and the brain need not be construed as discrete, incommensurable elements, but can be conceived of as complementary aspects of consciousness. As for the binary opposition between subject and object, I and thou, in relation to consciousness, Krishnamurti writes:

*“One’s consciousness is not personal to oneself. This is very difficult to accept because we have been so conditioned, so educated, that we resist the actual fact that we are not individuals at all, we are the whole of mankind.”*⁴

Krishnamurti is not typically quoted in the context of Western academic philosophy and science. I introduce his thinking here in order to derail that tradition, to insert into the mix a *parallel* mode of knowledge formation. If a Western philosopher is dismayed by the apparently illogical paradoxes of Eastern philosophy, s/he should take note of the fact that the Eastern philosopher is not equally dismayed by the preoccupation with the West’s logic of binary oppositions, because s/he accepts them as a necessary part – but only a part – of a unity. I propose a parallel, para-rational position that can accommodate both the rational and the irrational and that is self-reflexive about its application of both ways of knowing. Indeed, only such a position could formulate a logical argument, as I hope to be doing, that also leaps into the metaphysical realms that Krishnamurti and other like-minded thinkers address.

Alternate Forms of Consciousness: Transgnosis

American psychiatrist, Arthur Deikman theorizes consciousness as the physical and mental complements (embodied in human beings) of cosmic organization (the formal, structural order of the universe). Such forms of consciousness may radically transcend the human experience of time and space. That such great variations in consciousness could exist offers a humbling perspective on the importance of debating the limited range of human consciousness and the constrictions it imposes on science and other forms of knowledge production.

For Deikman, life is the physical dimension of cosmic organization, while awareness is its mental dimension. Organization itself is a unified concept that runs through everything in the cosmos, so it is the limits of our perceptual apparatus that erroneously dichotomize aspects of our experience. Phenomena exist as mental awareness while being observed

by non-sensory ‘faculties’ (memory, thought, imagery, intuition.) However, once they are observed by the sense (vision, hearing, touch, smell, taste) they become part of physical experience. Consciousness is not the experience of organization; rather, it is its complementary aspect. Thus consciousness is comprised of the mental and physical dimensions of cosmic organization.⁵

While Deikman collapses all consciousness into mental and physical aspects of cosmic organization, it may be useful to add another category, which I shall call ‘transgnosis’, that differentiates among various fields of awareness and ways of knowing. The transgnostic aspect of consciousness is not limited, however, to the physical and mental dimensions proposed by Deikman. Similar to but diverging from the awareness associated with physical and mental faculties, it is related to intuition in the sense that it is a form of consciousness not dependent on reason and logic. Unlike intuition, the Latin root of which, *intu-eri*, means ‘to look at or towards, to contemplate’, transgnosis cannot be experienced as a propositional form that can be sought after and cogitated. Derived from the Greek *γνώσις*, gnosis connotes a form of knowledge particular to a mystically enlightened person. But following Krishnamurti, it transcends the individual and is “not personal to oneself.” Transgnosis suggests an ethereal, universal omnipresence, the experience of which is manifest but is all but ineffable by rational means. It neither resides within the human subject, nor can it be the object of contemplation. Rather, it flows through everything, including human subjects and their physical and mental faculties.

Psi Phenomena & Synchronicity

Psi phenomena include processes such as telepathy, the physical and biological mechanisms of which currently remain unexplained. Are these phenomena commensurable with the type of explanations science is capable of rendering? Are psi phenomena an occurrence of the para-rational, an instance of the spiritu-cosmic that suggests forms of para-consciousness? What are the ramifications for the philosophy of mind?

There is much empirical scientific data, including meta-analyses by Daryl Bem and Charles Honorton, published in the prestigious *Psychological Bulletin*, which strongly supports the belief that psi exist.⁶ The mechanism by which psi purportedly functions remains unclear, though materialist accounts, such as those of Roger Penrose, might attempt to explain some of them in terms of quantum effects in neuron microtubules. While such explanations may be sustainable for certain psi phenomena, such as the receipt of real-time telepathic information,

their ability to interpret other psi phenomena – especially on a macro scale, such as telekinesis, and in a non-linear time frame, such as if the receiver makes predictions prior to the sender’s transmission, or over a great distance.

Swiss psychologist C.G. Jung developed his thesis on synchronicity in part to explain how psi phenomena transcend space-time causality. The work of J.B. Rhine at Duke University has shown experimentally that certain individuals can predict the outcome of a sequence of cards prior to their being drawn with significantly greater accuracy than can be attributed to chance (400,000 : 1 probability). Building on Rhine’s research, though apparently without his blessing, Jung defined synchronicity as the *acausal* complement of causality, a system of explanation equal to causality but differing from it in its understanding of space and time as elastic with regard to the psyche. Synchronicity refers to the simultaneous occurrence of two meaningfully but not causally related events. Together causality and synchronicity form an explanatory unity.⁸ In a related vein, Stephen Jay Gould has written that “tension and multiplicity have pervaded...Western views of time.... [S]omething deep in our tradition requires, for intelligibility itself, both⁹ the arrow of historical uniqueness and the cycle of timeless immanence – and nature says yes to both.” If we accept Jung’s theory of synchronicity and Gould’s theory of deep time, then the scientific method employed in Bem and Honorton’s work (despite the powerful evidence it has provided) cannot capture or evaluate those aspects of psi phenomena that do not correspond to causal models of behavior and a unidirectional flow of temporal unfolding.

The parapsychological research in question is based on the assumption that psi should behave according to traditional models of perception (involving material stimulus, physical sender and receptor organs, and the like.) Though Bem and Honorton provide empirical evidence that the functioning of psi phenomena can be at least partially attributed to causal relations, there is also evidence that suggests that a significant part cannot. They, themselves, recognize this as the “the conundrum that makes psi phenomena anomalous in the first place: their presumed incompatibility with our current conceptual model of physical reality.” (p.16) As they note, parapsychological research has empirically confirmed Bell’s theorem, which states that

“...any model of reality that is compatible with quantum mechanisms must be nonlocal: It must allow for the possibility that the results of observations at two arbitrarily distant locations can be correlated in ways that are incompatible with any physically per-

missible causal mechanism.” (p.16)

Such an assertion resonates in tune with Jung’s notion of synchronicity and with notions of the para-rational and transgnostic forms of knowing. Since most materialist explanations of consciousness and psi rest strictly on “physically permissible causal mechanisms,” they fail to account for the scientifically paradoxical correlation of observations at remote locations. An explanation along the lines of Penrose seems a desperately far-fetched attempt to salvage materialist science, and remains unconvincing because it lacks substantial empirical evidence to support its claim scientifically. In effect, it merely replaces one enigma with another. Admittedly, such notions as transgnosis are susceptible to the same critique, though they do offer an alternative strategy for approaching paradoxical phenomena that resist scientific explanations.

The artworks in *Esemplasticism – The Truth is a Compromise* provoke ways of knowing that cannot be reduced to facts or limited to screen-based representations. They seem to shun virtualization and insist on the concrete materiality of actualization. They equally insist on the phenomenological richness of human perception as an amalgam of sensory information and cultural formation, as an experience that occupies and activates physical space. As such they demand the corporeal, embodied presence of the viewer but also transcend the individual viewer. The viewer, in their midst, becomes acted upon physically by these works, which initiate affective experiences and heighten perception. The works demand self-awareness of one’s own consciousness as a living, perceiving being and also suggest a larger field of consciousness of which individual and collective human perception are but one component.

Edwin Deen’s *Terra Incognita* (2009) joins the physical and the metaphysical. The curious elements of this installation serve as technical props that trigger a train of mental associations in the viewer. One element can be interpreted as an ironic, small-scale homage to David Smithson. Harnessing the force of entropy, a frozen multicolored confection in a zip-loc bag melts into a shapeless quantity of uniformly colored liquid, the remaining popsicle stick being the only suggestion of its prior actualization as a solid form. An untitled work from 2007 hearkens the work of Thomas Hirshhorn and Hans Haacke. A freezer has been stripped down to its bare shell, revealing the cooling coils. Like Haacke’s *Ice Stick* (1966), Deen’s freezer transforms moisture in the air (gas) into ice (solid), which melts (water). The work generates a stream of consciousness (and H₂O) that flows in no particular direction but draws one into a purposeful purposelessness that simultaneously

challenges and reifies conventional notions of cause and effect. Much of the work is witnessed as physical evidence of these transformations, from which the viewer must construct in his/her own mind a physical and metaphysical archaeology.

Terry Haggerty's wall drawings play on the tradition of op artist Bridget Riley and the minimalist wall drawings of Sol Lewitt. Compared with recent reconsiderations of these precursors by Casey Reas using digital media to algorithmically generate screen-based images or prints, Haggerty's work is designed for, and actually applied to, the surfaces of a particular physical space. Its illusory optical phenomena alter one's perception of the environment, making the walls appear to curve, bulge, and recede. In so doing, they also force the viewer to focus attention on the phenomenological process of seeing, on the fallibility of perception, and on the relationship of consciousness to embodied experience.

Human perception is inclined to make connections between various forms of sensory phenomena on its own. As Brian Massumi has noted, ganzfeld experiments demonstrate that individual senses do not exist in isolation from one another; rather, vision is dependent on hearing and other sense modalities, and vice-versa.¹⁰ Yolande Harris's *The Pink Noise of Pleasure Yachts in Turquoise Sea* (2009) explores the relationship between sound and image, making audible the inaudible while simultaneously presenting a visual corollary. "Pink noise" is a technical term for a type of sound commonly found in both electronic devices and in the statistical structure of all images of nature. Harris uses the term as a pun in the ironically saccharine title of her sound and video installation, which suggests a dark side of yachting. While the sun refracts brilliant pink light that dances on the gentle, turquoise waves, high-powered marine engines under this elysian surface generate piercing otherworldly sounds (including pink noise) that are known to wreak havoc with navigation and communication among sea mammals, such as whales and dolphins. The viewer of Harris's work is placed in a perceptual enigma: Are the dancing pink sun and turquoise sea in the video projection responding to the yacht noises? Or has one's consciousness performed the act of synchronization on them? Although the sound waves generated by marine engines are literally present in the sea shown in the video (sadly, a national marine sanctuary in Spain), they cannot be heard without an underwater microphone (hydrophone) with which the artist recorded them and a sound system to amplify and reproduce them. Harris cleverly reveals the inaudible sounds of leisurely excess that permeate the sea, juxtaposing their haunting noise pollution with the natural beauty of the surface. In so doing, the artist not only questions the boundary between sound and image but expands our mul-

tisensory perceptual domain to include human and non-human perspectives. In *Pink Noise* we simultaneously see the sea as it visible to our own eyes from above it while we hear what dolphins hear beneath it, including our sonic impact on that aqueous environment.

Esemplasticism – The Truth is a Compromise demands forms of embodied perception of physical and multisensory phenomena and provokes enigmatic quandaries that push the limits of consciousness as a phenomenological experience. The works demand a reconsideration of both what it means to perceive and how knowledge is constructed through perception. They defy a univocal, fixed, and rational reading. Rather, they seem to suggest that phenomena and our experience of them are fluid, shifting, polymorphous, and illusory. They heighten our awareness of perception as an embodied form of knowledge production that consists of transgnosis, a form of awareness that is not directed at anything but flows through all things, that is unknowable by reason yet ubiquitously manifest. To return to an earlier metaphor, they demonstrate that phenomena cannot be conceived of as feet to be sheathed in glass slippers. This demands a model of knowledge that expands beyond the limits of scientific rationality. Moreover, the illusory quality of our understanding of things is not a negative value to be avoided. To the contrary, it is embraced as an inevitable quality at the intersection of sensory experience and reason. The illusion to be avoided is, instead, the mistake of imagining that knowledge could be anything other than that.

^{1/} Paul Feyerabend, "Nature as a Work of Art," in *Common Knowledge* 1, No. 3, 8 (1992): 10. ^{2/} Thomas S. Kuhn, *The Structure of Scientific Revolutions*, 2nd ed. (Chicago: University of Chicago Press, 1970.) ^{3/} Heinz von Foerster, "On Constructing a Reality" in *Environmental Design Research*, Vol. 2, F. E. Preiser (Stroudberg: Dowden, Hutchinson & Ross, 1973): 35–46. ^{4/} J. Krishnamurti, *The Network of Thought*. (New York: HarperCollins, 1982.) p. 52. ^{5/} Arthur Deikman, *The Observing Self: Mysticism and Psychotherapy*. Boston: Beacon Press, 1983. ^{6/} Daryl J. Bem and Charles Honorton, "Does Psi Exist? Replicable Evidence for an Anomalous Process of Information Transfer" *Psychological Bulletin*. Vol 115:1:4-18. See also: Cushing, J.T. & McMullin, E. (Eds.) *Philosophical Consequences of Quantum Theory: Reflections on Bell's Theorem*. (Notre Dame: University of Notre Dame Press, 1989.) ^{7/} Roger Penrose, *Shadows of the Mind: A search for the missing science of consciousness*. (New York: Oxford University Press, 1994.) ^{8/} Carl Jung, "Synchronicity: An Acausal Connecting Principle" in Robert Ornstein, ed. *The Nature of Human Consciousness*. (San Francisco: W.H. Freeman and Company, 1973.) ^{9/} (p. 200). Stephen Jay Gould, *Time's Arrow, Time's Cycle: Myth and Metaphor in the Discovery of Geological Time* (Cambridge: Harvard University Press, 1987). Quoted from Kristine Stiles, "Between Water and Stone: Fluxus Performance: A Metaphysics of Acts" *In the Spirit of Fluxus* (Minneapolis: Walker Art Center, 1993.) p. 96. ^{10/} Brian Massumi, *Parables for the Virtual: Movement, Affect, Sensation*. Durham: Duke University Press, 2002.

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Synchronisation can be defined as a contemporaneous meeting of two intrinsically independent events in a common time frame. Because these incidents could be independent from each other and because they have the ability to create a new sense during their encounter, synchronisation occurs in various nuances. Different stories can be created when two sounds meet, when a tune flirts with an image or noise bedazzles space. One nuance is the *occurred togetherness*, a relationship in which two join in serendipity but don't morph into one inextricable unity.

The classical definition of Synchronicity describes a simultaneous and time-shared analogy that can even occur in several spaces. It describes rapidly sequential events, which are not bound to cause-and-effect but nevertheless are perceived as rationally associated.

In 1938, one day before Halloween, Orson Welles directed his radio play version of H.G. Wells' "War of the Worlds", a broadcast in which fiction mingled with reality. Listeners heard their evening music programme interrupted by a news bulletin reporting that a "huge flaming object" had dropped to Earth. The news report was supported by interviews with eyewitnesses and scientists, who described the landing of an invasion force from Mars. With these voices and stories, which were accompanied by sound effects and theatrical sound staging, Welles created a nationwide mass panic. The fictional game overwrote reality; it made associations with and synchronized in listener's minds their growing fear of invasion during that time. It was a sign of the emerging power of the media, which can create deceptive simulations by playing with parallel worlds, expectations and synchrony. Although Welles may not have intended to create such chaos and fear, it was a viciously orchestrated arrangement of happenings in a single time flow.

Besides the synchronicity of fiction and reality, another synchronism exists: the post-production synchronisation of image and sound set up to create meaning. It is match-making, an arranged togetherness which is supposed to morph and not to resist against each other. "Singin' in the Rain" (1952) is one of the most well-known stories to explore the early technology of sound and image synchronisation. The plot follows a much-celebrated silent movie couple making the difficult transition to 'talkies'. It was revealed that the silent diva had an awful voice. She could neither hold a note while singing nor talk without mangling the words nor handle a microphone. Image and sound are finally unified in Kathy, a cheerful dancer with a beautiful face and a soft voice with whom Don finally falls in love.

Mickey-Mousing, a synchronising film technique (named after the