

QUANTUM HOLOGRAPHY, HERMENEUTICS, AND CONTEMPLATIVE LIVING

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ABSTRACT: This paper examines the relation between quantum holography, heightened attention (mindfulness), and hermeneutics as a potential access point to a transcendental idealism and system of signification in everyday life. In addition to research in quantum physics and contemplative studies, I draw upon the Gateway meditation program by the Monroe Institute, which utilizes quantum holographic science in its binaural hemispheric synchronization (“Hemi-Sync”) technology, as well as self-inquiry and visualization exercises. This paper seeks to contribute to understanding our place as historical agents in the cosmos by (1) exploring the holonomic principle of mind as a means for people to transform contemplative practices of mind into existential realities; (2) giving readers examples of contemplative practices that can result in personal transformation and a sense of the sacred; and (3) suggesting that philosophical notion of a transcendental ideal exists inescapably within human consciousness and the phenomenal world of everyday experience.

KEYWORDS: Quantum Holography; Binaural Beats; Semiotics; Narrative Network; Hermeneutic Phenomenology; Contemplative Practice; Panpsychism; Quantum Holography; Hermeneutics and Contemplative Living

In traditional semiotic theory, the system of signification signifies the meaning of an object in a given system, but the signified—the transcendent Truth of the earthly representation—is inescapably differed (Derridean “différance”); however, for semiotic signification to be successful, the transcendental ideal must be translated and made experiential in everyday reality. If a sign is not

“intelligible”¹ as such then it has no relevance in our lives and, therefore, no power. In order for a transcendental ideal to manifest in everyday life, I will show that we must have ways of connecting to, what Mircea Eliade calls, “sacred space” and “mythical time.” But what does a phenomenology of transcendence look like in real life? How might we ground a “spiritual science”²? One option is to engage in a contemplative practice that trains our ability to focus in ways that allow the extraordinary aspects of ourselves and our everyday lives to emerge. This paper examines such mindfulness training through the Gateway program by the Monroe Institute, including the quantum holographic science that connects the meditator’s mind with their external environment. In a holonomic perspective, transcendent ideals are not false promises of Truth, but, rather, Ideas become real when heightened attention to the present moment combines with resoluteness (*Entschlossenheit*) and rapture (*Entrückungen*). Essentially, when we train our ability to focus with binaural beats and self-reflection exercises, our brainwave state alters and creates certain moods—such as a hyper-relaxed (theta) state that can reduce anxiety—while self-reflection exercises help us participate in our narrative networks to access a way of being-in-the-world³ in which we co-create what emerges in our daily experience. First, I give a short overview of binaural hemispheric synchronization (“Hemi-Sync”), before fleshing out mindfulness exercises that can create opportunities for increased self-awareness and agency; and, in my third section, I explain quantum holography, including the role of hermeneutics between the holonomic principle of mind vis-à-vis the universal hologram.

GATEWAY “HEMI-SYNC” SCIENCE AND MEDITATION

The government document, entitled, “Analysis and Assessment of Gateway

¹ Martin Heidegger’s term “intelligibility” (*Verstandlichkeit*) refers to how an individual is predisposed to understand any experience: “meaning is that wherein the intelligibility (*Verstandlichkeit*) maintains itself” (*Being and Time*, Harper Perennial Modern Classics [2008, p. 152]).

² See Bo Dahlin, “Epistemology, Technology, and Spiritual Science,” *Cosmos and History*: “What would be the knowledge interest of *spiritual* science? Without further ado I suggest it is to serve the further evolution of humanity and Earth” (2021, p. 70).

³ The term “Being-in-the-World” (*In-der-Welt Sein*), comes from Heidegger; being-in-the-world means that being human is inextricably relational (with semiotic signs, with other human beings, etcetera). Authentic being-in-the-world is *ekstatic* and involves “anticipatory resoluteness” (*Entschlossenheit*) and “resolute rapture” (*Entrückungen*). See Heidegger’s *Being and Time* for more information.

Process”⁴ (1983/2016), written by Wayne McDonnell and published on the Central Intelligence Agency’s (CIA) online Reading Room, details the CIA’s rationale behind using the Monroe Institute’s Gateway Experience program. The Monroe Institute’s binaural hemispheric synchronization technology, known as “Hemi-Sync,” “uses pulses of sound to create in both brain hemispheres electrical wave forms simultaneously equal in frequency and amplitude” (Gateway Manual, p. 4). According to McDonnell (1983/2016), the Gateway program enabled participants to experience (and recall at will) brainwave patterns that paralleled brain scans of people with five-plus years of transcendental meditation training.⁵ By utilizing a phenomenon known as the frequency following response (FFR), in which brainwaves echo “the same frequency pattern by adjusting its brainwave output,” the brain creates a “third signal [i.e., a binaural beat], which is the difference in frequencies between the two signals in each ear” (McDonnell, 1983/2016, p. 5; Gateway Manual, p. 5). When a meditant listens to these “beat frequencies,” the Hemi-Sync recordings put “the body in such a profoundly relaxed state that [...] a massive, rhythmic sinewave pattern of sound [...] is received and transmitted into the brain itself via the fluid filled third and left ventricles located in the brain stem,” and an “electromagnetic pulse is then generated which stimulates the brain to raise the amplitude and frequency of brainwave output” (McDonnell, 1983/2016, p. 6). In this state of deep calm, the human mind is able to more easily “identify and [...] release fears, blocks, limits—anything that interferes with your growth or progress,” and “create at the mental level the changes you desire” to manifest in everyday life⁶ (Gateway Manual, 1989, p. 13; Gateway Manual, 1989, p. 14).

The science behind binaural beats includes a contemplative element. According to the 2014 study, “Auditory Driving of the Autonomic Nervous System,” by Patrick McConnell *et al.*: “Findings suggest that listening to binaural beats [...] exert an acute influence on both LF [low-frequency: sympathetic and parasympathetic activity] and HF [high-frequency: parasympathetic activity]

⁴ URL Access Link: <https://www.cia.gov/library/readingroom/document/cia-rdp96-00788r001700210016-5>

⁵The document also states that “Studies conducted [...] at the Menninger Foundation have shown that a subject with twenty years of training in Zen meditation could consistently establish Hemi-Sync at will [...] for over fifteen minutes” (p. 4).

⁶ McDonnell (1983/2016) notes that practices with similar results include neuro-biofeedback, transcendental or Zen meditation, and hypnosis.

components of HRV [heart rate variability] and it may increase subjective feelings of relaxation.” Moreover, the 2017 study, “Brain Responses to a 6-Hz Binaural Beat,” by Nantawachara Jirakittayakorn and Yodchanan Wongsawat notes that “the pattern of theta activity was similar to that of a meditative state, in which general theta rhythms were increased at the frontal and parietal-central regions.” The meditative state that binaural hemispheric synchronization elicits from meditants helps deepen their contemplative experience, and resultant contemplative insights, by helping meditants to let go of the negative narrative networks (through relaxation) and engage in more suitable narratives that better serve the meditant’s intentions. In fact, positive thinking plays an important role in the meditant’s journey, since, as Zajonc (2008) denotes, “a sense for the positive precedes the practice of openness” (p. 87). By awakening to the awe-inducing beauty of nature, for example, or a good conversation (engaging in contemplative dialoguing), mindfulness practitioners feel more positive about ourselves and their lives. Engaging in everyday sacred rituals that include the personal self and the external world enables the meditant to create a living relational holism that requires their participation.

In *Full Catastrophe Living*, Jon Kabat-Zinn (1990/2013) writes about “interior resources deep within ourselves [...] [that] can be tapped and utilized [...] for transforming ourselves” (p. xxvii). Mindfulness increases our familiarity with those “interior resources deep within ourselves” through practices such as stillness (e.g., meditation), generation (e.g., visualization), and relationality (e.g., deep listening and dialogue)⁷. Insofar as the meditant observes their thoughts and emotions without judgment, they can engage in self-inquiry, heightened attention and focus, and resultant contemplative insight. With the addition of Hemi-Sync brainwave training, which can “induce a state of profound calm within the nervous system” and “significantly lower blood pressure,” meditants can engage more deeply with their contemplative practices (McDonnell, 1983/2016, p. 6). During a theta brainwave state, meditants more easily set aside their fears and anxieties to open-up to new perspectives and possibilities, participating in the creation of their personal narratives. Essentially, when meditants observe their

⁷ Taken from “The Tree of Contemplative Practices,” in Barbezat and Bush, *Contemplative Practices in Higher Education* (2013).

thoughts without judgment and open-up to (and “let come”) a sense of the reverence of everyday life, they begin to engage in the hermeneutic practice of creating the personal stories that define our lives (Zajonc, 2008, p. 95).

MINDFULNESS EXERCISES FOR INCREASED AGENCY

The sound of ocean waves lapping on a transcendental shore of the mind begins most of the Gateway meditations. The Gateway Manual explains that “[o]cean surf-waves of natural energy in action is a symbol [...] : you will learn to perceive, tune, and control waves of your own natural vibrational energy” (1989, p. 9). Signaling the meditant to shift their focus from their external life to their inner life, the repetitive, calming sounds of ocean waves slow down mental busyness in the meditant’s mind. Slowing down is yet another practice in contemplative living that combines two of the core contemplative practices: “stillness” (e.g., meditation, silence) and “generative” (e.g., beholding, visualization)⁸. Yet another practice of slowing down and heightening our attention comes from Arthur Zajonc’s (2008) three-pronged protocol in which the meditant (1) chooses a focal point; (2) slows the pace of their attention in order to increase their receptivity to external stimuli and internal (personal) realizations; and (3) imagines their work as part of a sacred ritual (and imagines their life as a work of art). Such stillness and inward focus provides the meditant with the opportunity to disconnect from habituated, externally-focused narratives that are not helpful to the meditant’s intentions.

The second step in the Gateway meditation is a visualization exercise called the “energy conversion box,” in which listeners visualize a box to place their worries for the rest of the meditation. The Gateway Manual explains that the energy conversion box “allows you to release self-imposed limits, resulting from the encrustation of fear and associative emotion” (1989, p. 13). Much like the contemplative practices of observing without judging, and not identifying with one’s own thoughts, the Gateway energy conversion box assists meditants in the practice of “emptying ourselves of assumptions and judgments to let come” new possibilities (Zajonc, 2008, p. 95). By temporarily “emptying ourselves” of our daily worries, David Sable (2014) explains that we can “open the attention beyond

⁸ Daniel Barbezat and Mirabai Bush, *Contemplative Practices in Higher Education, Powerful Methods to Transform Teaching and Learning* (2013).

the words of the question itself and allow a deeper awareness to emerge” (p. 5). This “deeper awareness,” “beyond the words of the question [or daily worries],” characterizes the meditant’s potential to experience awe, devotion, and reverence in everyday life.

Once the Gateway meditant has placed their worries in the energy conversion box, the listener engages in “resonant tuning,” during which the meditant uses their vocal chords to audibly match the recording vocalizations of “Om,” “ah,” and other primordial utterances. Resonant tuning is another method for the meditant to focus their thinking inward. In fact, the Gateway Manual explains that resonant tuning “is a breathing exercise to help you vitalize [...] your vibrational energy while reducing internal dialogue,” which is created insofar as the meditants breathe out “tired, stale energy” and breathe in “vibrant, vital energy” (Gateway Manual, 1989, p. 10). By participating in this kind of physiological visualization, meditants are able to set an intention for how they want to feel and then experience that feeling by practicing how that feeling *feels*. Likewise, Zajonc explains that when we increase our attention on a focal point, such as concentrating on a blue sky, we are “becoming it and allowing it to become us” (2008, p. 103). This kind of practicing an ideal in our everyday lives, or surrendering in love to a transcendental Absolute (*fana*), reconciles the ideal and the real into a differentiated unity, an ecstatic Oneness.

The next exercise in the Gateway meditation is the “resonant energy balloon,” also known as the REBAL. A few practices can constitute creating a REBAL in your mind, one of which is imagining the number “10” inside a circle over your head, and then expanding that circle around your whole body. The REBAL recalls the pagan tradition of the magic circle, in addition to any symbolic protective circle as provided by enchanted charms, jewelry, cloaks, and spells throughout humanity’s myths and stories. However the REBAL is not merely a circle of protection: much like Kabat-Zinn’s “interior resources deep within,” the REBAL serves as “an intensification of your own energy [...] within and around you” (Gateway Manual, 1989, p. 12). Since the REBAL is a form of personal protection based on “your own energy,” it helps meditants engage in the mindfulness practice in which “you are practicing taking responsibility for being yourself and learning to listen to and trust your own being” (Kabat-Zinn, 1990/2013, p. 26). The REBAL’s extension and intension of personal energy also

recalls the mindfulness-based principle of relationality: “While every living organism is whole in itself, it is also embedded in a larger wholeness” (Kabat-Zinn, 1990/2013, p. 187).

Upon setting up the REBAL, meditants recite an affirmation that states that you are more than physical matter and that you wish to participate in the non-physical energy that influences your everyday life. The Gateway Manual explains that the affirmation “helps you focus your attention on what you want to accomplish during any exercise [...] thereby enabling you to become more aware of your expanding consciousness (1989, p. 10). Similarly to the Gateway affirmation, Kabat-Zinn also states that personal transformation “comes directly out of our ability to take a larger perspective, to realize that we are bigger than who we think we are” (1990/2013, p. xxvii). Insofar as the meditant states the affirmation that they are part of a larger cosmic consciousness, the meditant reflects Bush and Barbezat’s contemplative practice of “connecting your work to the moment, yourself, others, the significant or sacred” (2013, p. 40). Readers might stop for a moment and ponder: How might you behave *right now* if you believed that your life was a sacred story? How might that change the way that you treat yourself and others? When we expand notions of the sacred to include all life, as in accordance with contemplative practice, then all events are sacred happenings. Acknowledging the sacred means treating ourselves, others, and the universe with curiosity, openness, gratitude, and reverence.

The next step in the Gateway meditation is “Focus,” also known as focus # State (e.g., the 10-State). There are multiple Focus States⁹, which create different brainwave states: “In Focus 10, the 10-State, your mind remains awake and alert; your body is calmly, deeply, and comfortably sleep”; however, “Focus 12 is a state of expanded awareness: a high energy state where you can become more conscious of inner resources and guidance” (Gateway Manual, 1989, p. 11; Gateway Manual, 1989, p. 18). Gateway meditants can enter a Focus state at will by creating a REBAL and saying “10” (or your intended Focus state). After reaching the 10-State, meditants explore their thought patterns, assumptions/beliefs, and everyday lives, since, as Kabat-Zinn explains, “[o]ur

⁹ Specifically, Focus 3, Focus 10, Focus 12, Focus 15, and Focus 21—Focus 10 and Focus 12 the most commonly used in the Gateway meditations.

beliefs about ourselves [...] as well as how we see the world and the forces at play in it all affect what we find possible” (1990/2013, p. 11). Likewise, Bush and Barbezat (2013) denote that “when looking at something, suspend what you think you already know,” so that you can learn more about the focal object, and also facilitate a mutually transformative experience between the subject (mind) and the object of attention (p. 48). As detailed in *Meditation as Contemplative Inquiry*, “a feeling of devotion” fills the meditator in Zajonc’s blue sky meditation, who initially plays the role of subject gazing upon an object, but, through “becoming it [the color of the blue sky] and allowing it to become us,” the defining demarcations between internal and external, or subject and object, blur (2008, p. 103).

During one of the 10-State exercises of self-inquiry, the Gateway Manual suggests that meditators “[e]xperiment with creative monologues in Focus 10,” for example, asking self-reflective questions such as “What should I be asking?,” “What is the most important message that I can receive and understand at this time?,” “Who am I?,” and “What is my purpose here, and how can I best accomplish it at this time?” (1989, pp. 16-17). If meditators have temporarily emptied their worries, including their insecurities and their personal narratives, and paused their assumptions and beliefs about what is true and/or possible, they increase their receptivity to thoughts that may contradict their previously held assumptions, thereby circumventing any potential confirmation bias. Moreover, the Gateway Manual explains that: “If, at first, you feel as if you’re creating your own answers, gently acknowledge that if guidance is in any way connected to a more complete or higher aspect of your total self, then guidance would naturally seem to be coming from yourself, and therefore seem deeply familiar” (1989, p. 19). Essentially, in opening-up to creating new personal narratives, meditators take ownership of their “narrative network,” that is, “the story of who we think we are” (Kabat-Zinn, 1990/2013, pp. xlii). When meditators “initiate an inquiry into their role in the world and an examination of their personal sense of meaning,” they take a participatory role in their constructed identities, including how those identities engage with the world and recognize personally meaningful experiences. Personal identity functions both as a mental concept and as a physical reality that assists meditators in recognizing, nurturing, and delving into a meaningful life (Barbezat and Bush, 2013, p. 53).

Another self-inquiry exercise in the Gateway program is called “Guidance,” during which you “place your question at the center of your consciousness, and push it out, or let it flow strongly and surely out in all directions [...] and then release it. [...] A sense of thanksgiving seals the experience” (1989, p. 16). By asking for guidance from a “higher [transcendent] aspect of your total self” to gain a larger-scale perspective on one’s question, the meditant participates in the holistic relationality that characterizes much contemplative philosophy. During Guidance, meditants mirror the theory of quantum holography¹⁰ in which “a differentiated consciousness [e.g., a Gateway meditant] [...] merges with and participates in the universal consciousness [...] without losing the separate identity” (Gateway Manual, 1989, p. 18). When meditants practice intentional, heightened awareness of the self in relation to the external world, they can begin to see an underlying interconnectedness in lieu of mere separateness; this orientation in a relational holism allows the meditant to engage within a larger psychosocial ecosystem without losing their individual perspective. Mindfulness practice hones meditants’ skills in relational dynamics and meaningful connection, so that, as Dana Schneider and Elizabeth Keenan (2015) write, instead of “losing one’s self,” meditants build experiences of “discovering one’s self in the context of the larger world” (p. 6).

Part of Guidance is a step called “patterning,” which McDonnell defines as “concentration on the desired objective while in a Focus 12 State, [which is an] extension of the individual’s perception of that objective [...] and its projection into the universe” (1983/2016, p. 20). Such applied mindfulness guides meditants in taking ownership of their existential story-telling, and is, thus, *poietically* hermeneutic, since patterning requires meditants to visualize and intentionally ask for their desires. Likewise, the Gateway Manual explains that patterning “functions like problem-solving”: for example, to “create a pattern,” Gateway instructs meditants to “think, feel, or imagine that which you desire to become part of your life,” and then, similarly to the Guidance exercise, meditants are instructed to “place the pattern at the center of your consciousness and push it out or let it flow strongly and surely out in all directions and in all ways. Then

¹⁰ See Mitchell and Staretz’s definition of Quantum Holography: “Marcer (1997) has applied a theory called the Quantum Hologram [...] to propose that [...] all organisms from the simplest to the most complex are interconnected at a fundamental level using information obtained by nonlocal quantum coherence,” p. 193.

release it,” which “will assist the emergence of the pattern in your life” (1989, p. 19). Releasing the pattern is essential to the efficacy of this exercise, analogous to the Mindfulness-Based Stress Reduction (MBSR) teachings of acceptance and detachment. Sable (2014) illustrates this process of focusing one’s intention and then releasing that intention in order to give freedom to that intention: “[t]here are two steps to the structured contemplation practice”: (1) “one trains the attention on the object of contemplation without analyzing or manipulating it in any way”; and then meditants can (2) “allow deeper awareness to emerge” (p. 5). Additionally, Zajonc (2008) denotes the duality that results in autocatalytic emergence¹¹ when he explains that focused attention leads to emergent “open attention”¹²: “our awareness can reach beyond the strictly human to experience our interconnectedness with all existence” (Zajonc, 2008, p. 53).

This relationship between acceptance, release/surrender, and personal freedom centers upon the relational reciprocity of deep listening and beholding, in which, as Zajonc (2008) explains, “a new kind of relationship is formed [...] based in freedom” when “we are able to bring this [attentive] level of awareness to each other” (p. 53). When the meditant realizes that releasing their intention cannot result in losing that intention, due to the fundamental “interconnectedness with all things,” the meditant simultaneously realizes that there is no ‘out there’ in which the intention can escape, or become lost, in the deep ecology of mind and matter. This freedom *for* one’s intentions and desires is a freedom for the self to expand and contract, aligning the meditant’s desire (image) with realities (form). Essentially, patterning provides a way for meditants to have a stake in their own experience.

In contemplative exercises such as patterning or Zajonc’s blue sky meditation, the meditant’s “concentration on the desired objective” hones attention and focus, and blurs internal and external reality, as discussed with Zajonc’s blue sky meditation. Concentrating intensely on a focal point (or stated intention) eventually blurs the meditant’s mental distinctions between self and other, so that

¹¹ See John Padgett and Walter Powell’s *The Emergence of Organizations and Markets* (Princeton University Press, 2012). Padgett and Powell discuss “autocatalytic life” as a self-agential process that creates the conditions for actors to self-organize as a result of the “novelty” that “often emerges through spillover across multiple, intertwined social systems” (p. 3). This “autocatalysis” arises from the “interaction among autocatalytic networks” in multilevel selection and variation (p. 3).

¹² See Zajonc’s illustration (2008, p. 39).

the meditant is able to expand their point of consciousness and understanding of themselves in relation to the world. But more than mere understanding, the blurring of dualistic frameworks suggests an underlying “interconnectedness in all existence.” When the meditant is able to blur their internal experience with the external world, allowing themselves to become the blue and the blue to become them then the meditant opens up to the Romantic intuition of the “presence” that “rolls through all things” (Wordsworth, 1798/2014, p. 65). The meditant does not merely experience the external world as a phenomenon separate from the self, but, rather, presence is an expansion of the meditant’s inner reality. Meditation processes increase the meditant’s sense of awe and reverence in their everyday lives, and assists the meditant in being a creator of stories, with contemplative practices as tools to shape their everyday experience. Self-reflection and inquiry allows meditants to engage with story-making as if they were authors of the stories of their lives. Also referred to as a narrative network, we can take ownership over our stories by stating our intentions (for anything—e.g., a meditation, a dinner, a relationship) and acting in ways that are helpful in achieving those intentions.

Mindfulness-based transformation is personal – the meditant can shift from experiencing life as happening *to* them, to experiencing life as happening *within* and *from* them. This transformation is a shift in agency, in which the meditant acknowledges and participates in their own existential narratives. For example, the Gateway Energy Bar Tool visualization guides meditants in coming to a *greater awareness of their own personal power or life force*, as well as becoming more comfortable with *directing their personal power* (such as the meditant visualizing a circle around themselves to protect against unwanted negative energy from other people). In order to perform this exercise, the meditant has to position themselves (mentally and conceptually) in the timeless and highly esteemed positions of the myths and stories from which society conceives of an Energy Bar Tool. The Gateway Manual explains the Energy Bar Tool in terms of “[p]ower sticks,” which:

abound in both our history and mythology as links between human and spiritual forces, or as connectors between physical and nonphysical energies. Moses turned his staff into a serpent. Kings, queens, pharaohs and high priests carried symbolic maces and scepters. [...] Merlin focused his power through a wand. Diana [...] carried her bow and arrows. And [...] light sabers link the Jedi knights to the Force.

(1989, p. 21).

By performing visualization exercises that align the meditant with the heroes from society's oldest stories that have withstood the ravages of time,¹³ so too does the meditant raise themselves to that place of timeless importance in their imaginations. Moreover, since meditants create and use the "own Energy Bar Tool (EBT) in Focus 10" in whatever ways are most relevant for their lives, they are able to nurture "fuller participation in the sense world" (Zajonc, 2008, p. 137).

In addition to creating their own Energy Bar Tool, meditants have the option to "let it [their energy bar] grow large enough to become a vortex or tunnel and dive through it to explore further" (Gateway Manual, 1989, p. 22). By asking their meditants to direct their own meditation experience, after they have had sufficient training in Hemi-Sync and Focus 10, the Gateway program guides its meditants into taking incrementally greater personal agency. Analogous to meditants participating in "creative monologue" of self-inquiry and interpretation, the "vortex or tunnel" resultant from the Energy Bar Tool introduces trans-dimensionality into the meditant's experience. Engaging in what could be called an existential *Lectio Divina* practice, of "allowing yourself to be spoken to" by that which you haven't given personhood or comprehensible language (Barbezat & Bush, 2013, p. 117). Insofar as meditants engage in the ekstatic complexity frameworks of the holonomic meditations, they are able to create "a living image," as explored in the next section.

QUANTUM HOLOGRAPHY AND HERMENEUTICS

The holographic theory, or quantum holography, proposes that the universal hologram is not merely external (i.e., merely a setting in which humanity exists), but also internal to the human mind, as the underlying *structure* of our consciousness (K. Pribram, 1996; K. Pribram, 2004). The quantum hologram (both in the external environment and in the human mind) is holistic and, therefore, enables a relational exchange of information between various scales. Mitchell and Staretz explain such multiscale, emergent consciousness vis-à-vis "macro-scale quantum holography" as "a real phenomenon and is produced by

¹³ For more information on myths and fairy-tales that remain important to a culture, see Jack Zipes' *Why Fairy Tales Stick* (2006), which gives a fascinating overview on literary Darwinism and fairy tales.

conscious attention and intention by a percipient on objects of interest” (2011, p. 215). And McDonnell (1983/2016, p. 8) details that:

the holographic images being conveyed are projected upon those electrostatic fields of the mind and are perceived or understood to the extent that the electrostatic field is operating at a frequency and amplitude that can harmonize with and therefore ‘read’ the energy carrier wave pattern passing through it.

Like McDonnell’s explanation that quantum holographic information is stored and interpreted as “a frequency and amplitude [via] the energy carrier wave pattern,” so too Mitchell and Staretz explain that “Quantum Holography information is contained in the *amplitude, frequencies* and the phase relationships of the *underlying interference patterns* from the emitted quanta” (2011, p. 199). When we apply the trans-dimensional, quantum wave dynamics of the holonomic mind and universal hologram to dualistic philosophies of realism and idealism, immanent and transcendent, signifier and signified, a new philosophy emerges that harkens back to Romantic *Naturphilosophie* and spiritualism in which mind and matter co-inform one another (see Wordsworth’s “Tintern Abbey”: “Of eye and ear,—both what they half create,/and what perceive”). Building on the work of the New Materialists (e.g., Jane Bennett, Karen Barad), a quantum romanticism emerges in which mind (consciousness) can effect matter (perceived reality) as much as matter (environment) effects mind (psyche). The open-system structure that allows quantum holography to exist within the human mind (including “intelligibility” as such) parallels the symbolism of journeys that meditants undertake in service of their personal growth and opening-up to the sublime of everyday life.

Since meditation can reveal the extraordinary in ordinary everydayness—a “sense sublime” to use another Wordsworth phrase—the extraordinary, beyond comprehension sublimity of life¹⁴ reveals itself extant in ordinary everydayness but as an adequation—such divine immanence is only accessible with the respective “mood” (*Befindlichkeit*) or perspective. As McDonnell explains that “the technique of patterning recognizes the fact that since consciousness is the source

¹⁴ See Kant’s philosophy of the sublime: “The sublime [...] is an object (of nature) the representation of which determines the mind to regard the elevation of nature beyond our reach as equivalent to a presentation of ideas” (from *Critique of Judgment*, translated by James Meredith, quoted in *The Nature of Art: an Anthology* [2007, p. 53]).

of all reality, our thoughts have the power to influence the development of reality [...] if those thoughts can be projected with adequate intensity” (1983/2016, p. 20). Moreover, McDonnell (1983/2016) also specifies that while the meditator cannot alter an objective, universal reality, meditators with proper training can alter their individual experience of everyday life. The interconnection between the way we think and the objective reality can be grounded in hermeneutic theory, for example, with relational frame theory (RFT) and narrative networks. Physicist John Wheeler (1990) further illustrates this hermeneutical dimension of scientific empiricism when he famously wrote that:

every item of the physical world has at bottom [...] an immaterial source and explanation; that what we call reality arises in the last analysis from the posing of yes-no questions and the registering of equipment-evolved responses; in short, that all things physical are information-theoretic in origin and this is a *participatory universe*. (p. 5).

When we consider the micro-human level as a participatory component in the larger macro-ecosystem of the universe, the delimiting boundaries between human and non-human blur as the individual human perspective expands to include the environment and the environment is interpreted as an expansion of the human body.

The holistic relationality that defines the contemplative perspective reflects the scientific theories of fractal geometry, the holonomic theory of mind, and theoretical quantum physics. In the holonomic theory of mind, or holographic principle, macro-scales are compactified into micro-scales within the macro. For example, Bohm’s *Wholeness and the Implicate order* argues that we live in “a universe of unbroken wholeness [“in flowing *movement*”]. This is the *implicate* or *enfolded* order. In the enfolded order, space and time are no longer the dominant factors determining the relationships of dependence or independence of different elements” (1980/2002, p. xviii). Additionally, Bohm clarifies that “in the implicate order the totality of existence is enfolded within each region of space (and time). So, whatever part, element, or aspect we may abstract in thought, this still enfolds the whole,” which includes “both cosmos and consciousness as a single unbroken totality of movement” (1980/2002, pp. 218-219). Bohm illustrates this “implicate order” with the example how a hologram has the capacity to create a three-dimensional image from its two-dimensional surface depending on the angle of

impact from a wavelength of light.

While human understanding is inherently subjective (therefore unable to understand something without subjective bias), both the Gateway program and contemplative studies situate the individual as an inextricable component of the universe at a macro-scale. Likewise, Shelli Joye (2016) explains that “[w]hen the explicate order enfolds into the implicate order, which does not have any space, all places and all times are [...] merged, so that what happens in one place will interpenetrate what happens in another place.” Subjective mind and empirical matter “interpenetrate” in the junctions when hermeneutical interpretations coincide with external realities; such interpenetrations are able to coalesce into *poietic* manifestations of new forms (i.e., emergence theory) insofar as the meditant is able to create a powerful belief that ties into their narrative network. In fact, McDonnell explains that the “particular methodology” for patterning “is based on the belief that the thought patterns generated by our consciousness in a state of expanded awareness create holograms which [...] establishes the basis for actualization of that goal” (1983/2016, p. 20).

Such ‘generations’ might be possible through the holistic, relational structure extant in human consciousness and in the cosmos. For example, Timothy Murphy writes that “fluctuations of empty space contain an infinite number of immanent orders or fields that interact with one another,” therefore, reality can likewise be seen as “forces that are differential and exist only as relations” (1998, p. 223). The Gateway program grounds the concepts of both Bohm’s undivided universe and contemplative pedagogy’s holistic relationality in the meditant’s present moment. The meditant’s experiences of transcendence, awe, and *ekstasis*, need to be immediate, local in order to make contemplative insights relevant to the meditant’s daily life. By aligning contemplative insights with the meditant’s everyday life, the meditant is able to recognize (and cultivate) personally meaningful experiences *as such experiences occur* in the meditant’s everyday life. In fact, Michael Zimmerman persuasively argues that “[t]he Divine cannot be regarded as a super entity existing somewhere else, but instead constitutes the unconditioned openness or emptiness in which all things appear” (1993, p. 294). Likewise, meditants are able to interfuse ordinary, everyday life with ecstatic experiences insofar as they temporarily transcend the arrow of time during their meditations, which enables “the temporal openness that we are to expand,” and

allows “things and other humans to manifest themselves in more complex, complete, and novel ways, rather than as mere objects or instruments for ends” (Zimmerman, 1993, p. 245).

Essentially, mindfulness training can guide meditants in losing their sense of self in order to gain an expanded sense of self and world. The meditant does not merely participate within the “opening, the absencing in which [other] things can present themselves and thus ‘be,’” such as in Zajonc’s blue sky meditation, but also in the “openness in which presencing [one’s inner life/authentic self] transpires” (Zimmerman, 1993, p. 297). Contemplative inquiry and practice can thus help meditants take ownership of their identities and narrative networks in a way that results in real-life changes. Applying a hermeneutic approach to meditation assists meditants in “creating concepts”¹⁵ that better fit their existential needs and metaphysical desires by suggesting a quantum romantic narrative in which each human being is a microcosmic piece of “the infinite consciousness of the Absolute” (McDonnell, 1983/2016, p. 15). This Absolute consciousness is a function of the non-linear, *ekstatic* experiences of temporality that define contemplative states, like Hemi-Sync, in addition to the “holographic energy matrix” of human consciousness (McDonnell, 1983/2016, p. 8). Likewise, McDonnell (1983/2016) fleshes out how “the human mind is also a hologram which attunes itself to the universal hologram by the medium of energy exchange¹⁶ [...] thereby deducing meaning and achieving the state which we call consciousness” (1980/2002, p. 8).

McDonnell’s explication on the relativistic, entangled nature of reality also encompasses non-linear temporality. Physicist Isaac Bentov’s work on the

¹⁵ In *What is Philosophy?*, Deleuze and Guattari discuss the dismantling of the subject as a process that aides the subject in accessing “the discipline that involves *creating* concepts”: since “the concept must be created, it refers back to the philosopher as the one who has it potentially” (Deleuze and Guattari, p. 5, italics mine).

¹⁶ The “energy” that McDonnell refers to involves (1) “the electromagnetic sphere” of both “the Earth” and “the human body”; (2) “the electrons which spin in the energy field located around the nucleus of the atom”; and, collectively, (3) “the entire human being, brain, consciousness and all is like the universe which surrounds him, nothing more or less than an extraordinarily complex system of energy fields” (1983/2016, p. 7). Yet another emergent, relational ecosystem, energy “creates stores, and retrieves meaning in the universe by projecting or expanding at certain frequencies in a three dimensional mode that creates a *living pattern* called a hologram” (McDonnell, p. 7, italics mine).

structure of the universe as a “Torus,” a “shape of an immense, self-contained spiral,” in which “substantive evidence” suggests “the jet of matter which expanded into our universe has turned back on itself, eventually forming an ovoid or egg shape” (McDonnell, 1983/2016, p. 15). Akin to the holographic principle, “[s]ince the Torus is being generated by matter in all the various phases of ‘time,’ it reflects the development of the universe in the past, present, and future [...] they all exist in the universal hologram simultaneously” (McDonnell, 1983/2016, p. 18). This *ekstatic*, relational view of the universe that results in ontological emergence structures human consciousness as much as the human understanding of the cosmos.

The word *ekstasis*, from the Ancient Greek, meaning “to stand outside of,” like the contemporary English word “ecstasy,” or “ecstatic,” connotes a feeling of something transcendent of the meditator’s everyday experience, but such transcendence, in McDonnell’s words, “in order to attain self-consciousness, the consciousness of the Absolute must project a hologram of itself and then perceive it” (1983/2016, p. 24). Mindfulness practices of listening, beholding, dialoguing, and journaling, all increase understanding of ‘Other,’ deepening the meditator’s inner life, and increasing the meditator’s experiences of reciprocated recognition. Being ‘seen,’ recognized as who and how we want to be seen, is directly tied to identity. As Rodgers and Raider-Roth (2006) denote: “the moment [...] of recognition, of feeling seen and understood, [...] it is the excitement of discovering one’s self in the context of the larger world, rather than the worry of losing one’s self” (as cited in Schneider & Keenan, 2015, p. 6). In this regard, the quantum holographic theories underlying the Gateway program presents a meta-emergence: in the process of the Absolute’s self-recognition through individual human experience, human life itself becomes real—something sacred and transcendent, but also earthly and palpable.

Karl Pribram writes that “[u]nderstanding at any moment is hermeneutic and therefore partial, as is most scientific understanding” (“Consciousness Reassessed,” 2004, p. 8). The division between the sciences and the humanities reflects different perspectives that together form a more complete and accurate understanding of human experience. Both subjective experience and empirical objectivity are dependent upon relationality, and showcase the multiple perspectives and scientific ‘truths’ that can be contained in a single focal point as

well as in the system as a whole. Due to this relational structure, and the fact that understanding is “hermeneutic and therefore partial,” objective scientific empiricism can be reconciled with subjective interpretation. By considering the two “cultures”¹⁷ as a cohesive whole then instead of merely *reacting* to events, we can begin to *create* events (e.g., personal narratives, future plans, daily habits). Mindfulness practices aid the meditator in greater self-awareness and attentions, so that they may begin to witness their stories and then begin the *poietic* process of shaping those stories.

The notion that consciousness is, essentially, a hermeneutic process has profound implications for the role of interpretation in empirical rationality. As Barbezat and Bush (2013) write, contemplative practices help meditators cultivate “focused attention, reflection, and heightened awareness,” which reorients the human mind from focusing on helplessness, confusion, and sadness into experiences of feeling more “heard,” “seen,” and in control over themselves. Imants Barušs’ discussion that “consciousness can be thought of as a gateway for an ontologically primitive layer of consciousness that underlies the experiences of the ordinary waking state,” further illustrates this notion that the meditator’s internal mind has some influence over their external experience. Moreover, Barušs’ argument that “[v]olition, at the level of subjective consciousness invokes deep consciousness which gives shape to physical manifestation,” directly points to volition (intention) as a condition for intentional “physical manifestation.” Attention and intention causes physical manifestation because your thoughts and beliefs affect your actions. With such power comes responsibility, which contemplative living aims to confront and act on (e.g., “activism” is one of the key tenants of Barbezat and Bush’s [2013] contemplative practice framework). For example, during the mindfulness practice of observing without judging, the meditator suspends their assumptions and judgments on the object of their observation and engages in practices of deep listening within the observation, all of which cultivates experiences of curiosity, openness, and altruism. Approaching oneself and everyday life with openness, curiosity, and reverence transforms behaviors of othering and anxiety into inclusion, equity, accountability, and personal growth.

¹⁷ See C.P. Snow, *The Two Cultures* (1998, Cambridge University Press).

CONCLUSION

In *Zen and the Art of Motorcycle Maintenance*, Robert Pirsig explains that in the “high country of the mind one has to become adjusted to the thinner air of uncertainty, and to the enormous magnitude of questions asked, and to the answers proposed to these questions” (1974/2006, p. 156). Mindfulness training orients meditants in that “high country of the mind,” so that they may more quickly “become adjusted to the thinner air of uncertainty,” sharpening their minds and strengthening their capacity for kindness. When we add a hermeneutic, self-reflective element to our contemplative practices, we are more ready to respond with actions that better reflect who we are, what we value, and what we actually want to create for ourselves (as opposed to distracting ourselves with, as Heidegger would call, the inauthentic they-self).

A sense of the sacred awaits those who practice mindfulness, and, in such practice, we may find that the transcendent Absolute exists not only outside of us, but also *within* us. Derrida’s “stranger at home” is terrifying because the uncanny reaches beyond human comprehension (see Kant’s philosophy of the Sublime) and yet exists within consciousness itself. Insofar as we consider human consciousness as a hologram (a multi-dimensional, *ekstatic* complexity system that connects mental constructs with physical realities), we can intentionally cultivate a sense of the transcendent in everyday life, infusing more of what is possible into what is real.

We find the transcendent in the local – where the individual’s personal environments and headspace play an essential role in the relational autocatalytic emergence between mind and matter. The contemplative exercises discussed in this paper can more deeply familiarize us with our inner lives (e.g., our beliefs, emotions, mental constructs) to reveal how our external behaviors reflect those internal patterns. Since personal identity is the interface through which we engage in contemplative inquiry, we can utilize practices of heightened attention and visualization (among others) to transform our lives – to experience more of the ideal in the real. Through the enfoldment of mind and matter, contemplative living allows us to recognize our power to courageously create realities from the stories that we wish were real.

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