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Alan Watts and neurophenomenology

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Alan Watts (1915–1973) was a religious philosopher and interpreter of Zen Buddhism and Indian and Chinese philosophy to the West. Francisco Varela (1946–2001) was a biologist, a neuroscientist, and practitioner-scholar of Indo-Tibetan Buddhism. Watts and Varela share common interest in Buddhist and phenomenological approaches to human experience. In this article, I explore intersections of Watts and Varela regarding their phenomenologically grounded radical empiricisms, particularly: (1) embodied cognition; and (2) the specious present. This exploration is prefaced by establishing Watts' phenomenological place in Humanistic Psychology, and delineating Varela's neurophenomenological research agenda.

Keywords: neurophenomenology; radical empiricism; embodiment; specious present; William James; Alan Watts; Francisco Varela

Alan Watts (1915–1973) helped pioneer humanistic-transpersonal psychology through contributions to East–West psychology, the human potential movement, and the American psychotherapeutic counterculture. Likening orthodox psychoanalysis to religious cults, and institutional psychiatry to systems of brainwashing, he assisted psychology's liberation from tacit mind–body dualisms of nineteenth-century metaphysics (Watts, 1973a). The perceived 'ego' – behind thought is a thinker and behind knowledge a controlling knower separated from experiential flux – was, in Watts' view, a social fiction (Gordon, 2012; Watts, 1961). Nevertheless, Watts was intrigued by consciousness: does it emerge from the brain's neural activities? Is 'self' independent of the brain, or does the brain evoke a world which is simultaneously experienced?

These epistemological and ontological questions thrive among philosophers, psychologists, and neuroscientists. Nothing is known more intimately than conscious experience, yet nothing is harder to explain than consciousness itself. The 'hard problem' of consciousness is the problem of *experience* (Chalmers, 1995). When thinking and perceiving, a whir of information-processing abounds along with subjectivity. Why are human visual and auditory processing systems accompanied by visual or auditory experience? Experience, it is widely agreed, arises from physical bases, but no conclusive explanation for experiential *qualia* exists. Why should physical processes give rise to rich inner lives?

The problem of consciousness is a long-standing epistemological quandary. As Watts stated in 1973(a):

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> Put in metaphysical terms, psychological terms, physical terms, or neurological terms: it is always the same. How can we know what we know without knowing, knowing? This question must be answered, if it can ever be answered, before it can make any sense at all to say that reality is material, mental, electrical, and spiritual, a fact, a dream, or anything else. (p. 414)

Though writing as a religious philosopher, the extent to which Watts anticipated issues in neuroscience research, particularly, I suggest, Francisco Varela's neurophenomenology, seems remarkable. My article sketches intersections of Watts' and Varela's phenomenologically grounded radical empiricisms, chiefly: (1) embodied cognition; and (2) the specious present. I begin by establishing Watts' 'phenomenological' place in Humanistic Psychology, following with a description of Varela's neurophenomenological project. Note that I am not claiming that Varela drew directly from Watts, but simply that Watts expressed, and thereby presciently anticipated, issues subsequently considered in Varela's neurophenomenological project.

Alan Watts and Humanistic Psychology

Humanistic-transpersonal perspectives in psychology focus on significances of being fully, experientially human. They involve creating meaning, actualizing values, and achieving self-realization. Humanistic psychologists traditionally focus writings on the 'self' directly experienced, on fulfilling potential, intrinsic human motivations toward health, and existential themes inherent to interior exploration.

Humanistic Psychology ancestries span William James's person-centered psychological science, macropersonality theories and social psychologies of Gordon Allport, Henry Murray, and Gardner Murphy, self-actualizing/motivational psychologies of Carl Rogers and Abraham Maslow, and European existential-phenomenological psychotherapeutic traditions united by Rollo May and Henri Ellenberger. Centered in transforming reductionist experimentalism, humanistic psychologists pioneered person-centered, growth-oriented, existential psychologies of the whole person, thus advancing dialogues between sciences and humanities as viable forms of academic discourse. Transpersonal psychology, emerging from humanistic movements after 1969, began through experiential studies of entheogens, meditation, altered states of consciousness, and non-Western epistemologies (Gordon, 2013a; Taylor, 2009).

Alan Watts is identified historically among the principal purveyors of non-Western epistemologies for humanistic-transpersonal psychology. His twenty-first-century relevance is similarly located vis-à-vis pertinences of Buddhism, Daoism, and Hinduism for humanistic theory, research, and practice (Columbus & Rice, 2012). Yet Columbus (2012) and Rice (2012) also offered alternative visions of Watts' humanistic psychological bearing. They suggested that Watts adopt European phenomenological philosophy and psychology as pedagogical complements to various non-Western influences.

Phenomenology concerns consciousness, including rational waking states and unconscious dynamics, as experienced from first-person viewpoints. Experience is understood holistically and relationally as when people engage objects of consciousness through their meaning. Classical approaches in phenomenology include reflective analyses of lived experience (Husserl, Merleau-Ponty), contextual-interpretive hermeneutic phenomenology (Heidegger, Gadamer, Ricoeur), radical empiricism (James), and empirical-perceptual experiments (Gestalt psychology). Phenomenological

methods exploring first-person subjectivity allow for observing internal states using a meditative focus to loosen presumptions, thus affording essential understandings of lived experience.

Columbus (2012) outlined Watts' (1951, 1966/1989) applications of two phenomenological scaffoldings. First, Watts (1951) applied a Husserlian transcendental phenomenological method to the study of insecurity. There, Watts described the natural attitude of insecurity, employed bracketing procedures elucidating the intentionality of insecure experience, and applied further bracketing procedures toward uncovering alternative modes of awareness. Secondly, Watts (1966/1989) applied a hermeneutical phenomenology toward understanding identity. 'In *The Book*,' suggests Columbus (2012), 'Alan Watts introduced a multidimensional consideration of identity, differentiated two distinct networks or meaning vis-à-vis identity, engaged these horizons of meaning in a dialectic process, and fused these horizons of identity toward greater intuitive comprehension' (p. 64).

Rice (2012) examined four applications of Gestalt-phenomenological psychology by Watts to mystical experience according to their isomorphic neuroscience implications: first, Watts' (1960/1973c) application of organismic holism offering substantive alternatives to reductionist and supernaturalist languages about mystical experience; secondly, his (1963) person–world field theory correlating first-person subjective and third-person objective perspectives on mysticism; thirdly, Watts (1960/1973b) applied Gestalt understandings of 'insight' – abrupt perceptual reorganization of part–whole relationships – to first-person accounts of sudden illumination in transcendent mysticism; and fourthly, Watts (1960/1973b) employed Gestalt 'perceptual constancy' to understanding stabilities of transcendent insight after sudden illumination. Watts' Gestalt approach, in Rice's view, counterbalances neuroscience perspectives inordinately emphasizing biology and neurology to the detriment of subjective experience.

Francisco Varela and neurophenomenology

Watts' discussions of subjective mystical experience via Gestalt-phenomenology arguably presaged subsequent neuroscience work of biologist Francisco Varela (1946–2001). Varela was self-positioned in the general lineage of European phenomenology while emphasizing his own philosophical synthesis in light of modern cognitive science and non-Western experiential traditions. However, as evidenced by Varela's works (e.g. 1997, 1999; Varela & Shear, 1999), he was informed by Husserl, Merleau-Ponty, James, and Heidegger. He was also influenced by philosopher/psychotherapist Eugene Gendlin's 'focusing' method and psychiatrist Daniel Stern's work on pre-reflective experience in infants, expressions of meaning, and self-constitution (Petitmengin, 2009). Moreover, Varela was a committed practitioner-scholar of Indo-Tibetan Buddhist meditation, psychology, and philosophy. The mutually informative qualities of Buddhism and Western cognitive science provided existential and spiritual dimensions to his work (Thompson, 2001b).

'Neurophenomenology', a word devised by Laughlin, McManus, and d'Aquili (1990), was discerned by Varela and colleagues in the mid-1990s as an innovative research agenda for the neuroscience of consciousness. Neurophenomenology connected systems theory, cognitive computationalism, and autopoiesis by joining first- and third-person methods in experimental research. *First-person methods* concern

phenomenological experience and attention; present-time consciousness; body-image and volition; intentionality; perception, fringe and center; and subjective emotion. *Third-person methods* refer to neurophysiological measurements and analyses of large-scale sensorimotor brain processes, and cognitive testing. (Also, second-person perspectives, the interpersonal, intersubjective, and empathetic aspects of conscious experience are, like first-person experience, investigated via phenomenological strategies borrowed from non-Western epistemology and works by Husserl, Heidegger, and Merleau-Ponty (Petitmengin, 2009; Thompson, 2001a; Varela & Shear, 1999).

Varela pursued two main complementary research agendas: (1) experimental studies using multiple electron recordings and mathematical analysis of large-scale neuronal integration during cognitive processes; and (2) philosophical-empirical studies of the 'neurophenomenology' of human consciousness (Varela, 1996). Varela and colleagues showed that human perception of meaningful complex forms (high contrast or 'Mooney figures') were accompanied by phase-locked synchronous oscillations in distinct brain regions (Rodriguez, Lachaux, Martinerie, Renault, & Varela, 1999), and that the unified cognitive moment depends on large-scale neurological integration (Varela, Lachaux, Rodríguez, & Martinerie, 2001). Additionally, Varela published technical, experimental, and mathematical papers on nonlinear dynamical analyses of brain activity (Martinerie, Adam, Le van Quyen, Baulac, & Varela, 1998), phenomenological studies of human consciousness (Varela, 2001; Varela & Depraz, 2000), and co-edited texts on phenomenological approaches to consciousness and cognitive science (Petitot, Varela, Pachoud, & Roy, 1999; Varela & Shear, 1999). Thorough elaborations of neurophenomenology's historical roots are set out in Gordon (2013a) and Robbins and Gordon (2015).

Watts, Varela, and radical empiricism

William James (1897) described his budding philosophical metaphysics as 'radical empiricism'. By 'empiricism', James meant not sense data alone, but the full range of human experience. By 'radical', he meant that science must neither admit into its constructions any element not directly experienced, nor exclude any element directly experienced, including relations connecting thoughts, which are themselves objects of experience (Taylor, 1996). Radical empiricism was James's solution to problematical aspects of materialistic and idealistic monisms. Whereas the former ignores or rationalizes mental realms, the latter intellectualizes physical realms. Thus, radical empiricism was James's attempt at legitimating genuine experience-as-experienced, including 'pure experience' – that is to say, awareness in the immediate moment before the differentiation of subject and object, as viable topics of study in psychology and philosophy.

Alan Watts, too, expressed radically empirical metaphysics. Three examples will suffice, all of which critically reference logical positivist philosophy and scientific empiricism. Watts (1953) rejoined the positivists' conclusion that logical analyses of metaphysical statements reveal mere tautological gibberish. Their conclusion, in Watts' view, does not eliminate the 'common human *feeling*' that 'existence, consciousness, or "Reality"' are metaphysically perplexing issues (p. 137). Watts (1956/1994) likewise suggested that positivist frames of reference, including operational definitions of movements and behaviors, result in a 'vast net of abstractions' concealing as much as they reveal about empirical data. Watts contended that knowing phenomena

only in terms of artificially limited frames such as operational definitions is a 'hollow' comprehension 'almost exactly like what Indian philosophy means by *maya*, the idea that all such knowledge is in some sense an illusion' (p. 18). Thus, suggested Watts (1975), philosophers entrapped in rationalism may renew their 'basic wondering' (p. 193) or 'wonder at being' by moving beyond language via what he variously called 'interior empiricism', 'contemplative mysticism', (p. 194) and 'idealess contemplation' (p. 197).

Varela likewise adopted radically empirical departure points for neurophenomenological research, understanding that neither objectively derived neuro-correlates nor purely theoretical propositions effectively comprehend *qualia* or ineffable conscious experience. Rather, he focused scientific attention on exploring systematically the single link of mind and consciousness, seemingly discernable and natural – *the structure of human experience itself*. For Varela, scientific research needed to be complemented with detailed phenomenological investigations of human experience as lived and articulated in the first person. Instead of positing extra ingredients accounting for emergences of consciousness from matter and the brain, Varela found meaningful bridges between these two irreducible phenomenal domains via applications of Husserl's phenomenological *epoché* to subjective experiences which, 'at the same time, are sufficiently intersubjective to serve as constructive counterparts for external analysis' (Varela, 1996, p. 341).

Embodied cognition

Watts' writings on interplays of cognition and bodily processes span at least three domains of knowledge, including erotic experience (e.g., 1958/1991), psychedelic experience (e.g. 1960/1973c), and self-experience (e.g., 1963, 1966/1989). The emphasis here is on the third domain, particularly Watts' (1963) description of Gestalt-perceptual 'selves' as greater than skin-encased egos; rather, people are organism–environment matrices. Watts further elaborated his description of the organism–environment matrix in *The Book* (1966/1989):

> Our knowledge of the world is, in one sense, self-knowledge. For knowing is a translation of external events into bodily processes, and especially into states of the nervous system and the brain; we know the world in terms of the body, and in accordance with its structure. (p. 100)

Yet simultaneously: 'the total environment evokes the organism. The total environment (or situation) is both spatial and temporal, both larger and longer than the organisms contained in its field' (p. 104). People are not only individual members of a biosphere, but also structures 'of such fabulous ingenuity' calling 'the whole universe into being' (p. 105).

Subsequently drawing on Pribram's holographic theory, Watts (1973a) suggested that brains are not merely reflecting external worlds, but instead create and select forms and patterns functioning as dissipative structures, decreasing uncertain visual perception. Thus, the Jamesian stream of consciousness was, for Watts (1958/1991), a Mobius strip, twisting back upon itself (pp. 20–21). While memory-stored sensory streams are means by which people perceive their egos, they only enable a *feeling* that behind thought there was a thinker and behind knowledge a knower. The

individual standing aside a changing panorama of experience to order and control was, in Watts' view, an imaginative fallacy. As Watts wrote (1966/1989):

> In the act of putting everything at a distance so as to describe and control it, we have orphaned ourselves both from the surrounding world and from our own bodies – leaving 'I' as a dis*contented* and alienated spook, anxious, guilty, unrelated, and alone. (p. 105, original italics)

Varela, Thompson, and Rosch (1991) likewise argued that cognitive science did not distinguish ideas of 'self' from actual bases of their representation, which involve individuals grasping after egos, nor did it take seriously its own findings of the lack of self, rooted in the absence of disciplined methods for examining human experience before neurophenomenology. Watts and Varela would certainly have concurred that knowledge resulted from ongoing subjective interpretations emerging from capacities of understanding rooted in structures of biological *embodiment* that are *enacted* within domains of consensual action and cultural history.

'Embodiment' refers to bodily aspects of human subjectivity: the biological and physical presences of bodies as vital experiential perquisites for emotion, language, thought, and social interaction. It provides a systematic and dynamical framework for understanding how a cognitive self – a mind – can arise amidst an organism's operational cycles of internal regulation and outgoing sensorimotor coupling (Rudrauf, Lutz, Cosmelli, Lachaux, & Le van Quyen, 2003).

The term 'enactivism', initially proposed by Varela et al. (1991), marks a cognitive science paradigm originating in Maturana's (1975) biology research program (see also Maturana, Varela, & Uribe, 1974). Enactivism merged ideas that: (1) living beings are autonomous agents generating and maintaining identities, thereby *enacting* or bringing forth their own cognitive domains; (2) nervous systems, as autonomous systems, generate and maintain coherent and meaningful activity patterns according to their operation as circular and re-entrant sensorimotor networks of interacting neurons; (3) nervous systems do not process information in the computationalist sense, but create meaning; (4) cognitions are embodied actions (cognitive structures emerge from recurrent sensorimotor patterns of perception and action). Thus, the worlds of cognitive beings are not pre-specified, external realms, represented internally by brains, but relational enactments by autonomous agents and person–environment couplings (Thompson, 2005).

Emergent self-making processes are grounded in fundamentally recursive activities characterizing lived experience: autopoiesis at the biological level, temporalization and self-reference at the level of conscious experience, and conceptual and narrative construction at the intersubjective level (Thompson, 2007). As Watts would likely agree (e.g. Watts, 1977a, 1977b), this Buddhist-enactive conception of 'self' provides a middle path in which streams of experience become self-referential through structures of time-consciousness. Embodied beings are thus pre-reflectively aware of themselves in and through active bodily strivings, while embodied self-knowledge is ongoing and thus never completely grasps its totality.

In other words, proprioceptive awareness of bodily aspects of internal human subjectivity makes cognition possible, but perceiving is a doing, rather than merely happening (Noë, 2004). As the enactive approach reveals, perception is not only a brain process, but a whole-person activity. Embodiment thus plays central roles in

structuring human experience, cognition, and action. Individuals are mindful of bodily sensations *and* have a sense of ownership built into pre-reflective experiential structures not requiring conscious perception or judgment to recognize in awareness or introspection (Gordon, 2013b).

As Watts explored pre-reflectively in relation to Zen Buddhism, 'Zen is feeling life instead of feeling something about life' (1958, p. 18). Watts (1958/1991) likewise suggested: 'to observe silently, openly, and without seeking any particular result … signifies a mode of direct observation and perception in which there is no duality of seer and seen; there is simply the seeing' (p. 74). This is not a mind empty of content, but a mind empty of mind – in other words, '*Satori*, the effortless, spontaneous dawning of a realization' (p. 77).

Varela (1999) also described the mind as phenomenology in action. Via first-person and third-person perspectives, he situated behavior in a specific cycle of operation where the mind's locus emerges through distributed processes within its organizational closure. Minds are fluxing patterns in which concrete biophysical beings live. As embodied selves in dynamic equilibrium, we continually emerge in interactions of constituents and interactions of interactions.

Varela's position, like Watts', remained situated in the irreducible nature of conscious experience. He studied phenomenal experience or lived embodiment from the first-person viewpoints aligned with cognitive and mental events (e.g. attention, time consciousness, body image) representing an irreducible ontological level retaining qualities of immediacy because it played a role in the organism's structural coherence. Consciousness was thus, for Varela (and Watts), a distributed phenomenon of whole active organisms, not just brains embedded in environments. Rejecting computational-logical views of mind in favor of concrete embodied lived descriptions of its processes, Varela (1992) (and likely Watts) saw the mind as a *selfless* or a virtual self – 'a coherent whole that is nowhere to be found, and yet can provide an occasion for the coordinated activity of neural ensembles' (p. 60).

The specious present

The phrase 'specious present' refers to temporal consciousness of the unified cognitive moment, or what James (1890) called 'the only fact of our immediate experience' (p. 609). James diagrammed the specious present in his chapter on 'The Stream of Thought':

> If we represent the actual time-stream of our thinking by a horizontal line, the thought of the stream of any segment of its length, past, present, or to come, might be figured in a perpendicular raised upon the horizontal at a certain point. The length of this perpendicular stands for a certain object or content, which in this case is the time, thought of, and all of which is thought of together at the actual moment of the stream upon which the perpendicular is raised. (p. 629)

James called the specious present 'the original paragon and prototype of all conceived time … the short duration of which we are immediately and incessantly sensible' (p. 631). Moreover, James found 'awareness of change [as] the condition on which our perception of time's flow depends' (p. 620), and posited relationships between bare phenomena or immediately known things, and changing brain states cognizant

of objects. He argued that the entire brain process *is* the state of consciousness, the soul, a medium upon which these processes combine their effects, but how or why no mortal may ever know.

Alan Watts writes of the specious present – the here-and-now – in theological, anthropological, and phenomenological terms. Theologically, Watts (1950/1965) writes of time and eternity vis-à-vis the Absolute (God) and relative (humanity). Anthropologically, Watts (1958/1991) writes of non-historical, traditional societies focusing not on futures or pasts, but the present tense or, alluding to T. S. Eliot, 'the still point of the turning world' (p. 16) of seasonal cycles and rotations (see Gordon, 2012). Phenomenologically, Watts (1958/1991; see also 1977b) identified psychological time as ungrasping, unhurrying interchanges of senses with their objects: deep inward consents to be and feel what we are at every moment; ordinary minds being the present given states of consciousness, whatever their nature. Through this sense that everything is *Tao*, 'one is thereby initiated from the world of clock time to the world of real time, in which events come and go of themselves in unforced succession – timed by themselves, and not by the mind' (p. 205).

Watts phenomenologically described the mystical here-and-now as an immersion of self in the world; the immediate present experience was IT – the entire reason for the existence of a universe (Watts, 1960/1973b, 1960/1973c). Like breath rising and falling or seasons coming and going, all things are constant processes arising, forming, and dissolving. Illusions and distortions, caused by belief in fictional egos bent on fortification and justification of selves, prevent recognizing the harmonious unity underlying and pervading all of life. Watts saw eternity as now, and in the light of unrepressed vision, individual and world constituted the divine realm. Thus, life was not going anywhere, because it was already there. As Watts (1958) so eloquently stated vis-à-vis Zen Buddhism by way of James's stream of consciousness:

> Zen is an immediate contact with life, a joining of 'self' and 'life' into so close a unity and rhythm that the distinction between the two is forgotten. Here, the isolated 'self' no longer wishes to grasp at the things which flow by in the stream of events, for it goes forward with the stream and becomes one with it, realizing that all things are but waves in this stream and that to try to clutch hold of them is to make them disappear. (p. 121)

Varela's (1999) neurophenomenological study of time-consciousness recognized the value of Husserl's phenomenological bracketing for elucidating the neurodynamics of temporal appearance using an *enactive* or embodied approach with two complementary aspects: (1) ongoing person–world coupling; and (2) autonomous activity based on emerging, endogenous configurations or self-organizing autopoietic patterns of neuronal activity. Varela found converging conclusions in Husserl and James (and, as I suggest, Watts) regarding a paradox of human temporal experience: 'on the one hand, there is the present as a unity, an aggregate, our abode in basic consciousness, and on the other hand, this moment of consciousness is inseparable from a *flow*, a stream … ' (pp. 268–269, original italics).

Varela (1999) illustrated how 'lived time' is not physical-computational, but existential-phenomenological. He spoke of 'remembrance' as an entree to time-flow via emotion, affect, and mood. While intended objects are centers of attention, there also are contextualizing peripheries (the Jamesian 'margin') of embodied experience. The fringe, although not intended (Husserl), was enlivened by remembrance (pp. 290–

291). Through neurophenomenological analysis, Varela proposed a 'fourfold structure of nowness' with a basic center/fringe structure: (1) static constitution (the past); (2) genetic constitution (immanent temporalization of self-motion and directed intentionality relative to position in phase space); and (3) spatial (the role of the center–periphery at the core of temporalization). The fringe (4) reappears in the preconscious, affective substrate and the conscious, embodied ego as awareness of emotional change in the other.

Conclusion

In this article, I have placed Alan Watts within the phenomenological lineage of Humanistic Psychology, summarized Francisco Varela's neurophenomenological research project, and suggested radically empirical intersections of Watts and Varela vis-à-vis embodied cognition and the specious present. The space remaining allows for only brief concluding remarks as follows. Watts' expertise with non-Western epistemologies such as Buddhism, Taoism, and Hinduism is well known and needs no elaboration here. Yet the phenomenological quality of his work is only now being recognized (Columbus, 2012; Rice, 2012), including, as demonstrated above, Watts' phenomenologically based neuro-philosophy anticipating and relating to Varela's neurophenomenology. Neurophenomenology 'represents the culmination and integration of a long line of alternative, nonreductive and holistic approaches to biology and cognitive neuroscience' (Robbins & Gordon, 2015, p. 207), including Goethe's holistic biology, James's functionalism, Von Uexküll's phenomenological ethology, Goldstein's holistic neuroscience, and Merleau-Ponty's phenomenological comportment. Watts' own neuro-philosophy, I suggest, belongs to this ancestry.

Speaking in the first person about contemporary neuroscience views of embodiment, Guy Claxton (2013) said: 'Through the body I am deeply ecological, profoundly and ceaselessly in conversation with the physical and social milieu in which I am embedded (and from which I continuously arise)' (Pupils section, para. 1). That Watts himself was articulating this contemporary understanding more than 60 years ago reflects his neuro-philosophical prescience.

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