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Abstract

Mindfulness-based interventions are becoming an increasingly popular means for helping students deal with the multidimensional challenges they face in contemporary educational settings. While potentially helpful, an uncritical employment of mindfulness in education can paradoxically function to reify the very neoliberal social conditions leading to the need for mindfulness in the first place. I assess this trend in educational theory and practice through John Dewey's pragmatic philosophy. I show that the potential for both mindfulness and Dewey's theory of mind and inquiry to support critical, sustainable social change is truncated by an uncritical retaining of the modern paradigm of mind that defines mind and cognition as private mental events internal to individual subjects. Following Dewey, I critique this view of mind as dubious according to the ontological assumptions underlying this paradigm. By presenting an original reading of Dewey's theory of mind, life, and inquiry based on an autopoietic process ontology and the life-mind continuity thesis, I show that the sciences of mind are currently in the midst of a revolutionary period of science, shifting from a paradigm rooted in the substance metaphysical tradition to a new, transdisciplinary paradigm animated by process metaphysics and radically different theories of mind, life, and cognition, heuristically captured by the life-mind continuity thesis. On this view, life and mind are of a piece; where there is life there is mind. Showing that Dewey developed one of the first and most complete theories of this thesis, I integrate Dewey's theories of mind and inquiry with the contemporary mindfulness movement and discuss how they can work together to enable a critical, socially engaged yet compassionate and uniqueness-respecting framework for a somatic-based holistic social inquiry in education. I call this *mindful inquiry*.

MINDFUL INQUIRY: A DEWEYAN ASSESSMENT OF MINDFULNESS AND
EDUCATION

by

David J. Wolken

B.A., University of Northern Colorado, 2010
M.S., Syracuse University, 2018

Dissertation

Submitted in partial fulfillment of the requirements for the degree of
Doctor of Philosophy in Cultural Foundations of Education

Syracuse University
December 2020

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yes, I will always maintain this – ultimately ineffable. Our critical conversations were essential conceptual yeast for the baking of this philosophical bread.

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Long life,
Honey in the heart,
Thirteen thank-yous,

Oryingham,

David J. Wolken

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Note on References to *The Collected Works of John Dewey*

References to the work of John Dewey are to the volumes of *The Collected Works of John Dewey* and are abbreviated in the standard form of initials for the series, followed by volume number and page number. Thus, for example, the first page of the first volume of the *Later Works* would be cited as LW1:1.

EW Boydston, Jo Ann, ed. *The Collected Works of John Dewey*. Vol. 1–5. 37 vols. The Early Works, 1882-1898. Carbondale and Edwardsville: Southern Illinois University Press, 2008.

MW ———. *The Collected Works of John Dewey*. Vol. 6–20. 37 vols. The Middle Works, 1899-1924. Carbondale and Edwardsville: Southern Illinois University Press, 2008.

LW ———. *The Collected Works of John Dewey*. Vol. 21–37. 37 vols. The Later Works, 1925-1953. Carbondale and Edwardsville: Southern Illinois University Press, 2008.

Specific entries referenced for this study include the following books, articles, and essays:

EW1:3-8 – “The Metaphysical Assumptions of Materialism”

EW1:19-33 – “Knowledge and the Relativity of Feeling”

EW1:48-60 – “The New Psychology”

EW1:93-115 – “Soul and Body”

EW1:122-143 – “The Psychological Standpoint”

EW1:144-167 – “Psychology as Philosophic Method”

EW1:253-435 – *Leibniz’s New Essays Concerning Human Understanding*

EW2:1-366 – *Psychology*

EW3:56-74 – “On Some Current Conceptions of the Term ‘Self’”

EW3:110-124 – “Poetry and Philosophy”

EW3:142-146 – “How Do Concepts Arise from Percepts”

EW4:152-188 – “The Theory of Emotion”

EW5:96-110 – “The Reflex Arc Concept in Psychology”

EW5:202-203 – “The Æsthetic Element in Education”

EW5:844-95 – My Pedagogic Creed

MW1:113-130 – “‘Consciousness’ and Experience [Psychology and Philosophic Method]”

MW1:131-150 – “Psychology and Social Practice”

MW3:79-82 – “The Terms ‘Conscious’ and ‘Consciousness’”

MW3:101-106 – “Reality as Experience”

MW3:153-157 – “The Realism of Pragmatism”

MW3:158-167 – “The Postulate of Immediate Empiricism”

MW3:249-272 – “The Relation of Theory to Practice in Education”

MW4:3-14 – “The Influence of Darwinism on Philosophy”

MW4:98-115 – “What Pragmatism Means by Practical”

MW4:125-142 – “Does Reality Possess Practical Character?”

MW4:251-264 – Syllabus: The Pragmatic Movement of Contemporary Thought

MW6:69-79 – “Science as Subject-Matter and as Method”

MW6:178-357 – *How We Think*

MW7:31-43 – “What are States of Mind”

MW7:113-128 – “Education from a Social Perspective”

MW8:3-13 – “The Subject-Matter of Metaphysical Inquiry”

MW10:3-48 – *The Need for a Recovery of Philosophy*

MW10:53-63 – “The Need for Social Psychology”

MW10:64-66 – “Duality and Dualism”

MW13:40-60 – “Realism Without Monism or Dualism”

MW13:61-71 – “An Analysis of Reflective Thought”

MW14:3-233 – *Human Nature and Conduct: An Introduction to Social Psychology*

MW15:308-315 – “Introduction” to F.M. Alexander’s *Constructive Conscious Control of the Individual*

LW1:1-326 – *Experience and Nature*

LW2:55-62 – “Individuality and Experience”

LW2:104-110 – “Affective Thought”

LW2:236-372 – “The Public and Its Problems: An Essay in Political Inquiry”

LW3:25-40 – “Body and Mind”

LW4:1-257 – *The Quest for Certainty*

LW5:147-160 – “From Absolutism to Experimentalism”
LW5:161-177 – “Philosophy”
LW5:243-262 – “Qualitative Thought”
LW5:267-278 – “What I Believe – Living Philosophies”
LW5:289-298 – “Philosophy and Education”
LW5:363-367 – “Social Change and Its Human Direction”
LW6:3-21 – “Context and Thought”
LW6:3-259 – *Essays*
LW6:53-63 – *Science and Society [Philosophy and Civilization]*
LW6:156-181 – “The Need for a New Party”
LW8:107-352 – *How We Think*
LW9:1-58 – *A Common Faith*
LW9:76-80 – “Imperative Need: A New Radical Party”
LW10:1-352 – *Art as Experience*
LW11:86-94 – “Peirce’s Theory of Quality”
LW11:226-237 – “Education, the Foundation for Social Organization”
LW12:1-773 – *Logic: The Theory of Inquiry*
LW13:3-62 – *Experience and Education*
LW14:98-114 – “Time and Individuality”
LW16:1-294 – *Knowing and the Known*
LW16:383-89 – “Experience and Existence: A Comment”
LW16:369-82 – “Philosophy’s Future in Our Scientific Age: Never Was Its Role Model More Crucial”
LW17:35-36 – “On Philosophical Synthesis”
LW17:442-450 – “Methods in Philosophy and the Sciences”

Introduction: Toward an Account of Mindful Inquiry as Critical Social Inquiry – Integrating Deweyan Inquiry and Mindfulness for Contemporary Social Change

I think it shows a deplorable deadness of imagination to suppose that philosophy will indefinitely revolve within the scope of the problems and systems that two thousand years of European history have bequeathed to us. Seen in the long perspective of the future, the whole of western European history is a provincial episode. I do not expect to see in my day a genuine, as distinct from a forced and artificial, integration of thought. But a mind that is not too egotistically impatient can have faith that this unification will issue in its season. (LW5:159-60)

~ ~ ~

In “The Need for a Recovery of Philosophy,” John Dewey writes that “philosophy recovers itself when it ceases to be a device for dealing with the problems of philosophers and becomes a method, cultivated by philosophers, for dealing with the problems of men” (MW10:46). He later states that the most urgent intellectual task of our time is the “intelligent human control of social change” (LW5:363). Many scholars and practitioners working to integrate mindfulness into education share this concern for leveraging education as an agency of social change, citing everything from student anxiety to climate change as issues that a mindfulness-based education can and should aim to alleviate.¹ This study is an attempt to take up Dewey’s call for a recovery of philosophy as a means of social change, a “generalized medium of intercommunication, of mutual criticism through all-around translation from one separated region of experience into another. Thus philosophy as a critical organ becomes in effect a messenger, a liaison officer, making reciprocally intelligent voices speaking provincial tongues, and thereby enlarging as well as rectifying the meanings with which they are charged” (LW1:306).

1. Claudia Eppert et al., “Intercultural Philosophy and the Nondual Wisdom of ‘Basic Goodness:’ Implications for Contemplative and Transformative Education,” *Journal of Philosophy of Education* 49, no. 2 (2015): 274-93.

Contemporary education and mindfulness, I will argue, are both limited in their capacity to effect substantive social change by their adherence to what Dewey calls the “modern subjectivist” (LW1:168) paradigm of life-mind. This paradigm entails two interrelated premises that still dominate most scholarship in the mind sciences² and in mindfulness-based interventions (MBIs): 1) “mind” refers to an individually-contained mental phenomenon; and 2) “the individual” exists prior to and independent of “the social.” I will show that these two premises underlie what an increasing number of scholars have critically discussed as “McMindfulness,” which is mindfulness manifested within and taking on the characteristics of a neoliberal sociopolitical milieu.

To avoid this neoliberalizing of mindfulness, which ultimately functions to reify the very social conditions mindfulness is intended to redress, I will engage Dewey’s pragmatic reconstruction of philosophy as a model for how to move beyond the modern subjectivist paradigm of life-mind. This entails a radical, comprehensive paradigm shift that fundamentally redefines life, mind, experience, and inquiry. When the mutually informing *metaphysical* and *metaphilosophical* levels of this paradigm shift are embraced, philosophy – inquiry generally, inclusive of scientific and humanistic inquiry – is transformed from a technical, specialist’s discourse to an embodied social practice. In like manner, mindfulness is transformed from an individual, mental exercise to a critical social inquiry obtaining on the level of social systems, organizations, institutions, and cultures. Ultimately, I will claim that when Dewey’s radical

2. I employ the term “mind sciences” as an efficient way of saying “the philosophy and science of mind,” inclusive of a wide range of empirical, theoretical, and clinical studies of life, mind, cognition, and related phenomena. As I discuss throughout the dissertation, part of the paradigm shift currently occurring in these fields is a questioning of extant divisions between disciplines, such as the separation of theoretical metaphysics from the empirical sciences. For instance, in a recent edited volume exploring a process metaphysics-based biology, Daniel Nicholson and John Dupré claim that “scientific and metaphysical conclusions do not differ in kind, or in the sorts of arguments that can be given for them, but [only] in their degree of generality and abstraction.” *Everything Flows: Toward a Processual Philosophy of Biology*, eds. Nicholson and Dupré (New York: Oxford University Press, 2018), 4.

reconstruction of philosophy and inquiry is properly interpreted, education as such can be understood to be an inherently, intrinsically “mindful” phenomenon.

A Paradigm Shift in Mind: The Importance of Ontology for Mindfulness

In *Experience and Education*, Dewey explains that the task of a philosopher of education is to “call attention to the larger and deeper issues of Education so as to suggest their proper frame of reference” (LW13:4). He urges philosophers of education to “think in terms of Education itself rather than in terms of some ‘ism [e.g., Traditionalism or Progressivism] about education” (LW13:4). I suggest that the contemporary mindfulness movement – which is peddled by many scholars and practitioners as a wholesale sociocultural “revolution”³ – has, so far, largely functioned as the latest “‘ism” in education, promoted as a quick-fix cure-all for a diverse set of educational challenges characterized by the interrelations among a multitude of complex phenomena incorporating individual, interpersonal, pedagogical, institutional, sociocultural, historical, economic and political dynamics. I contend that the principles and practices characteristic of the mindfulness movement possess truly revolutionary potential but that this potential is currently neglected and limited due to a lack of a “proper frame of reference” for the issues the movement purports to address.

Following Dewey, I will argue that the proper frame of reference for “the larger and deeper issues of Education,” and especially for mindfulness in education, is the restoration of the naturalistic continuity of life and mind (LW1:224). Though the American pragmatists, and especially Dewey, initiated this revolution at the turn of the 20th century, the paradigm shift has yet to be fully actualized. I contend that this is because the inclusive *metaphysical-metaphilosophical* nature of this shift has not been adequately understood and developed.

3. Barry Boyce, ed., *The Mindfulness Revolution: Leading Psychologists, Scientists, Artists, and Meditation Teachers on the Power of Mindfulness in Daily Life* (Boston, MA: Shambhala, 2011).

Over the past few decades, research in the philosophy and sciences of mind has revealed the need for a paradigm shift in the theory and study of mind. This need has also been revealed by the diverse and still-proliferating set of issues manifest in both the research and application of mindfulness in education (and society at large). I will show that the major lacuna in both cases is a neglect of the central *metaphysical* component of the emerging paradigm of mind and a lack of appreciation for how this metaphysical component is necessarily part of a larger, more inclusive *metaphilosophical* revolution in the life and mind sciences. I will also suggest that this neglect of metaphysics figures in the mis-reading of Dewey's theories of mind and inquiry. By making explicit the metaphysics entailed in the *life-mind continuity thesis*⁴ (which captures the key concept at the core of the paradigm shift), the theory of mind needed to actualize the socially-critical potential of Deweyan inquiry and mindful education can likewise be explicated and incorporated into mindfulness-based educational endeavors.

I will emphasize throughout that the paradigm shift occurring in the sciences of mind is not restricted to philosophy, psychology, cognitive science, or neuroscience but is a truly *transdisciplinary* shift entailing changes of such extent that entire fields of study must be fundamentally redefined and/or integrated with other, otherwise distinct and independent, fields of study. Some scholars working with the evidential anomalies prompting the paradigm shift have noted the radical extent of the changes needed. Jonathan Doner, for instance, admonishes that

I think it's time for psychology – yeah, psychology – to provide the new statement of those things that really, truly matter. And it's time for a really new statement; not just a new meal, but a whole new way to cook. Not just a new class, but a whole new way to be. [We need a psychology] that understands intelligence as the foundation of all natural information-driven processes...that understands the expression of species intelligence in the evolution of life...that understands that the defining characteristic of human

4. Michael D. Kirchhoff and Tom Froese, "Where There is Life There is Mind: In Support of a Strong Life-Mind Continuity Thesis," *Entropy* 19, no. 4 (2017): 169-186, <https://doi.org/10.3390/e19040169>.

intelligence is its experience of and comprehension of the bipartite nature of the Absolute...When the first point is thoroughly understood, *psychology will be in the possession of a radically new ontology*. As the second point is understood, *biological and psychological theory merge* and evolution is seen as inherently – and necessarily – psycholinguistic. Finally, as the third point is fully comprehended, *humanity will not just have passed from one intellectual phase to another, it will have crossed a threshold to an entirely new form of being*.⁵

I will show how Dewey sought just these changes. Namely, a radically new ontology for psychology such that psychology and biology are wholly integrated in such a way as to enable not only new theoretical questions but an “entirely new form of being,” as Doner says. Ontology, very generally, is the study of “what is,” which is to say the nature of existence as such and the nature of specific things within existence.⁶ For example, a particular ontological perspective might posit that reality is made of inanimate physical matter whereas a different ontological perspective might posit that reality is made of spirits, souls, or deities. My use of and attention to “ontology” in this study is meant in the broadest, most inclusive sense of asking the very big and basic questions about “what is.”

The desire for creating entirely new forms of being is also found in various segments of the mindfulness movement. For many scholars and practitioners, mindfulness is far more than a casual stress-reduction practice; it possesses truly revolutionary potential, which is to say the ability to advance humanity into an as-yet-unseen manner of existence or at least a radically new social reality.⁷

Unmindfully Employing Mindfulness in Education: Avoiding the McM mindfulness Phenomenon

5. Jonathan Doner, “Toward a New Psychology,” *Educational Philosophy and Theory* 50, no. 14 (2018), 1396.

6. Thomas Hofweber, “Logic and Ontology,” in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta, Summer 2020 (Stanford University, 2020), <https://plato.stanford.edu/archives/sum2020/entries/logic-ontology/>.

7. Barry Boyce, ed., *The Mindfulness Revolution: Leading Psychologists, Scientists, Artists, and Meditation Teachers on the Power of Mindfulness in Daily Life* (Boston, MA: Shambhala, 2011).

Without an understanding of the metaphilosophical, transdisciplinary nature of the needed paradigm shift, however, both Dewey's theory of mind and contemporary research and application of mindfulness are significantly truncated. This results from the easily made error of trying to embed and engage the new *concepts* of mind from within the concrete social, institutional, and scholarly-disciplinary *structures* built according to the modern paradigm of life-mind. What results is an ironic liability for mindfulness proponents trying to leverage mindfulness as a means of redressing phenomena like the epidemic of student stress, which I discuss in chapter five. The irony is that the new paradigm of mind does away with the mentalistic, individual-psychological conception of mind, and the full application and tangible manifestation of this requires a reorganization of academic disciplines, a reconstruction of human inquiry as such, and the restructuring of social institutions and organizations. But without such restructuring (e.g., wholly integrating psychology with biology and sociology), the new non-psychological concept of mind is taken up within and applied through a theoretical-practical framework anathema to the emerging paradigm. The upshot is a situation wherein scholar-practitioners of mindfulness believe they are advancing a revolution but in fact are reifying problematic social-institutional conditions by continuing to define and engage "mind" as an individual, psychological phenomenon.

I quote in full the following passage to show that Dewey's reconstruction of philosophy into a critical social inquiry was based on an assessment of social conditions very similar to those plaguing the mindfulness movement today. Dewey saw that the trend in psychological research was toward specialization and the fragmenting reduction of life-mind through ever-increasing degrees of technical detail and nuance. The effect of such research is to lose perspective and

control of “inclusive wholes,” which as I will show is what defines life and mind as such, according to the new paradigm.

Old ideas do not die when the beliefs which have been explicitly associated with them disappear; they usually only change their clothes. Present notions about the organism are largely a survival, with changed vocabulary, of old ideas about soul and body. The soul was conceived as inhabiting the body in an external way. Now the nervous system is conceived as a substitute, mysteriously within the body. But as the soul was ‘simple’ and therefore not diffused through the body, so the nervous system as the seat of mental events is narrowed down to the brain, and then to the cortex of the brain; while many physiological inquirers would doubtless feel enormously relieved if a specific portion of the cortex could be ascertained to be *the* seat of consciousness. Those who talk most of the organism, physiologists and psychologists, are often just those who display least sense of the intimate, delicate and subtle interdependence of all organic structures and processes with one another. The world seems mad in preoccupation with what is specific, particular, disconnected in medicine, politics, science, industry, education. In terms of a conscious control of inclusive wholes, search for those links which occupy key positions and which effect critical connections is indispensable. But recovery of sanity depends upon seeing and using these specifiable things *as* links functionally significant in a process. To see the organism *in* nature, the nervous system in the organism, the brain in the nervous system, the cortex in the brain is the answer to the problems which haunt philosophy. And when thus seen they will be seen to be *in*, not as marbles are in a box but as events are in history, in a moving, growing never finished process.⁸ Until we have a procedure in actual practice which demonstrates this continuity, we shall continue to engage in appealing to some other specific thing, some other broken off affair, to restore connectedness and unity – calling the specific religion or reform or whatever specific is the fashionable cure of the period. Thus we increase the disease in the means used to cure it. (LW1:224-25; emphasis original)

8. As I will discuss at length in chapters two and three, the paradigm shift from a substance metaphysics to a process metaphysics entails a radical change in how basic conceptual metaphors such as “in” are understood. In the modern, substance-based paradigm, “in” denotes a physical-spatial location and relation, as in “marbles...in a box,” as Dewey says. For Dewey, conversely, based on the process ontology of his pragmatism, “in” has a fundamentally *functional* and *emergent* – or emergently functional – meaning. By an organism being “in” nature Dewey means that the eventual function, process, or event we abstractly name “organism” (over against the correlate abstraction of “environment”) exists as such *as a functional component* of nature as a continuously changing series of emergent events. Insofar as an organism, as a naturalistic event among all other naturalistic events (LW1:179, 324), serves the function of supporting itself by supporting the dynamic integration of the field of transactivity that organizes its component parts/events, the organism exists as such and can be said to be “in” nature as a member (LW1:188). But insofar as the “particularized centers of initiation and energy” (LW1:168) we abstractly name “organisms,” “subjects,” “selves,” or “individuals” *do not* function in such a way as to sustain the dynamic transactivity of the field of which they may proleptically be an emergent part, they technically are not “in” that field, system, or organization of energies (LW1:309) as a member. George Lakoff and Mark Johnson (1980, 1999) have produced treatises thoroughly detailing how our concrete, physical embodiment creates the metaphorical nature of our conceptual language and understanding, such as the case with “in” as a physical-spatial metaphor.

I suggest that Dewey's assessment here was remarkably prescient and just as relevant today as it was when published in 1925. I contend that the major dilemma for mindful education today is captured in Dewey's claim that

Those who talk most of the organism, physiologists and psychologists, are often just those who display least sense of the intimate, delicate and subtle interdependence of all organic structures and processes with one another. The world seems mad in preoccupation with what is specific, particular, disconnected in medicine, politics, science, industry, education. (LW1:224)

I will show that this is still commonly true today; that is, most research in the mind sciences, including mindfulness, is still preoccupied with specificity and particularity, and this manifests in the individual-psychological conception of mind as a subjective phenomenological experience. While some mindfulness scholars have noted that a paradigm shift is occurring or at least is needed and desired, the metaphilosophical level of this shift is neglected. As a result, even though much mindfulness research and practice is intended to redress conditions of disconnection and fragmentation – namely by overcoming the mind-body disconnect through an engagement of somatic exercises – current approaches to mindfulness ironically reify the very trends toward division and separation they are meant to overcome. This, I will suggest, is due to the persistence of the modern subjectivist view of life-mind retained in most mindfulness research and practice.

The dilemma for mindfulness today is that theory, research and practice in the mind sciences is stuck between two paradigms, opening in some ways to the new paradigm but retaining much of the old paradigm, even in the process of trying to incorporate the new. For instance, while most scholars have given up strict Cartesian mind-body dualism in favor of some version of physicalism or materialism (e.g., mind reduced to neurological activity, the “neural

correlates of consciousness” – see chapter two), the modern subjectivist paradigm of life-mind persists. As Richard Campbell explains,

The Cartesian model of two substances – mind and matter – has long been outdated, but a common contemporary response is to reject just one (usually mind). Thereby materialism, or physicalism as this philosophical position has been articulated in recent decades, simply truncates the Cartesian framework. I call it a ‘one-legged’ version of Cartesianism. We need a new model of Nature which genuinely moves beyond Cartesianism altogether, and which not only encompasses the ontological emergence arising from the stacking of micro-to-macro levels, but also the diachronic evolution of both entities and self-organized systems.⁹

This imbalanced, one-legged Cartesian framework has manifested in the mindfulness movement as well. While the vast majority of mindfulness practices are intended to overcome the mind-body duality by restoring a holistic experiencing through engagement with somatic exercises such as yoga and meditation, a neglect of larger social dynamics – and the social nature of mind generally – enables what an increasing number of scholars has critiqued as the McM mindfulness phenomenon, which is essentially the neoliberal manifestation of mindfulness. Being so specialized in their respective disciplines, mindfulness scholars have become mired in a set of intractable debates concerning technical, abstract concepts relating to mindfulness. Attendant this “preoccupation with what is specific, particular, disconnected in medicine, politics, science, industry, education” is a neglect of the sociopolitical conditions and factors contributing to the very experiences of fragmentation that mindfulness is supposed to help overcome. But, lacking adequate attention to and engagement on the level of “inclusive wholes,” as Dewey says, mindfulness risks “increas[ing] the disease in the means used to cure it.”

It was precisely this dilemma that Dewey warned against and sought to overcome with his pragmatic approach to social challenges and to the philosophy of education. What is needed to overcome the modern tendency toward disconnection and fragmentation, Dewey says, is “a

9. Richard Campbell, *The Metaphysics of Emergence* (New York, NY: Palgrave Macmillan, 2015), 211.

genuine, as distinct from a forced and artificial, integration of thought” (LW5:159), as the quote in the epigraph suggests. Dewey consistently critiqued the “over-specialization and division of interests, occupations and goods” (LW1:306): “knowledge has become so specialized and subdivided that its unity has become dissipated” (LW5:296). In his essay “Philosophy and Education,” Dewey explains that the specialization of and division between philosophy and education results in the latter being vulnerable to the whims of social trends: the “vital bond of union” between philosophy and education in Greek society, he says,

has long since been broken. ... Both education and philosophy have found a multitude of special problems with which each has to occupy itself, and in this specialization of both, the two have grown apart. ... Thought and attention have been diverted to details, and the sense of the encompassing whole has been blurred and often lost. Yet this very situation may be viewed as a call to restore the lost connection of serious thought upon the problems of life with the work of education (LW5:292). ... Without serious and consecutive study at an intellectual centre [sic], we are in great danger of impairing the efficacy of education by yielding on one hand to a ballyhoo of glorification of anything and everything as long as it is new and different, and on the other of becoming hampered by reactionary economic and social forces, so that we content ourselves with adherence to the old in the face of radically new conditions. (LW5:295)

I believe that many educators today, lacking a unified framework of life, mind and education, have succumbed to this tendency toward a reactionary response to current socioeconomic conditions and have glorified anything and everything “mindful” as the “fashionable cure of the period” (LW1:225). This is not to say that mindfulness is worthless; far from it. In fact, the purpose of naming this tendency to engage mindfulness as a panacea for not only education’s but all of society’s issues¹⁰ is precisely to indicate what is needed to actualize the critical potential of mindfulness in the face of today’s “radically new [social and economic] conditions,” as Dewey says. With academic research being so highly specialized, the literature on mindfulness manifests

10. Ron Purser and David Loy, “Beyond McMindfulness,” HuffPost, July 1, 2013, https://www.huffpost.com/entry/beyond-mcmindfulness_b_3519289. Accessed 1/20/2020.

this irony: “mindfulness” has been hastily adopted by scholars from literally dozens of fields and hundreds of disciplinary sub-specialties as a convenient and seemingly self-evident construct on which is based a dizzyingly-diverse range of research programs, theoretical frameworks, practical applications, secular and religious ethics, curricula and pedagogical methods. The irony is that while this widespread discussion and embrace of “mindfulness” has given scholars and practitioners the false sense that there simply *is* such a “thing” as “mindfulness” which can be readily studied and applied to everything from kindergarten classrooms and daycare centers to military command centers and multinational corporate board rooms, the research literature on, and practical applications of, “mindfulness” are as conceptually diffuse, theoretically contradictory, and strategically idiosyncratic as the diverse range of disciplines, contexts, and experts purporting to equally lay claim to competent knowledge of a singular thing which their own unique construction of makes anything but singular.

Dewey’s assessment is again prescient. What is needed is “serious and consecutive study at an intellectual center,” but this is prevented by scholars’ “adherence to the old [paradigm of life-mind] in the face of radically new conditions.” The irony of the contemporary mindfulness movement is that it is driven by this desire for an intellectual center, which scholars have attempted to create by suddenly embracing “mindfulness” as an organizing term and practice supposedly immediately applicable to all persons and all aspects of life. But, as I discuss in chapter one, “mindfulness” is anything from a coherent concept and the current approach to mindfulness research and practice – adhering, intentionally or not, to the modern subjectivist paradigm of life-mind – in fact contributes to the fragmentation of the movement rather than supporting a “genuine...integration of thought” (LW5:159).

This dissertation is driven by the conviction that without a sustained, critical evaluation of the currently-developing paradigm shift in the “old ideas” of mind, life, education and inquiry that Dewey clusters under the heading of “modern subjectivism,” the quick adoption of “mindfulness” programs in education risks increasing the dis-ease of a fragmented social world by reifying a dualistic framework of mind-body and individual-social that “mindfulness” is supposed to help overcome. Without engaging the somatic practices characteristic of the contemporary mindfulness movement from a perspective explicitly informed by a nuanced and inclusive study of the emerging paradigm of mind, the potential of mindfulness and education to serve a sustained, creative, and critical engagement with today’s social challenges will be indelibly truncated. Specifically, the social-systemic nature of mind must be properly grasped and engaged as part of a holistic approach to comprehensively reforming education such that education as such is inherently “mindful.”

Dewey’s naturalistic pragmatism and reconstruction of philosophy into a somatically-based, practically-engaged social inquiry – understood in reference to the process ontological life-mind continuity thesis at the core of his pragmatism – provides a framework for redefining education and inquiry such that its practice *as such* is mindful. I will call this *mindful inquiry*. When “mind” is redefined according to an autopoietic process ontology, “education,” “inquiry,” and “mindfulness” are likewise fundamentally redefined. The *autopoietic* theory of life and mind posits that the processes characteristic of living systems are self-producing. The nature of these processes is such as to show the ontological continuity of – which is to say functional integrity and unity of – what has been conceptually divided as “life,” “mind,” and “inquiry” (and related divisions such as “thinking” and “feeling,” “physical” and “mental,” “individual” and “collective,” etc.). Ultimately, I will argue that rather than conceptualizing “mindfulness” and

“education” as originally two distinct things – which thereby leads to the question of how to integrate them or *apply* mindfulness *to* education – Dewey’s naturalistic pragmatism enables a redefinition of “Education itself” (LW13:4) such that education *as such* is inherently, intrinsically, necessarily “mindful.” This reconstruction of mind (and “body”), education, and inquiry is so complete that, on the perspective I hope to establish, it would make as much sense to talk about “mindful education” as it would to talk about “bodyful gymnastics.” Nobody is writing about “bodyful gymnastics” because of the obvious redundancy of the term; gymnastics *just is* a characteristically embodied experience. To say “gymnastics” is to refer to a practice that, by definition and in principle, entails a holistic engagement of bodily movement and ability. In like manner, I will argue that education, conceptualized according to the life-mind continuity thesis at the heart of the emerging paradigm of mind, is intrinsically, inherently, and in principle “mindful.”

Redefining education and mind according to the life-mind continuity thesis avoids the paradox of mindfulness increasing the disease it is meant to cure by shifting the scope and definition of the problem being addressed. The contemporary mindfulness movement typically seeks to address problems such as student stress and academic performance by “targeting”¹¹ individuals through mindfulness-based interventions that employ somatic practices as a secularized, formulaic therapeutic to help individuals cope with the distressing conditions characteristic of contemporary schooling (and society generally). In a neoliberal sociopolitical milieu, however, this individualized approach to mindfulness can contribute to the pathologizing

11. The rhetoric around mindfulness is not insignificant. Terms such as “targeting” individuals or students and “interventions” evoke a pathologizing, battle-oriented approach to mindfulness programs. Such warfare-battle terminology is common in popular discourse in the United States and western-colonial society generally.

of stress as a subjective problem whose individual responsibility it is to solve, even in the face of inequitable, unhealthy, oppressive, and violent social conditions.

Just as Dewey seeks to overcome the intractable debates couched within the framework of the mind-body duality by rethinking the metaphysical premises underlying that duality, I propose to overcome the debates and issues surrounding the implementation of mindfulness in education in a highly individualized, neoliberal social context by rethinking the metaphysical-ontological premises underlying the modern subjectivist paradigm of life-mind-inquiry. What is needed in both cases is an understanding of the naturalistic continuity and social nature of life-mind enabled by the process autopoietic ontology at the core of Dewey's pragmatism. This is the basis of the life-mind continuity thesis, which redefines mind as an emergent, transactive function of social systems as dynamic, autopoietically-organized unities. From this perspective, mind as such is a social phenomenon in which individual-subjective experience has a functional office defined by the holistic dynamics of social systems as autopoietically-organized, functionally-unified, thermodynamically-open yet informationally-closed process systems tensionally stabilized in a constantly-changing (i.e. diachronically-continuously emergent) condition of far-from-thermodynamic equilibrium (i.e., such systems are *homeodynamic* rather than *homeostatic*¹²). This shifts the focus from mindfulness being defined as a *set of specific practices* engaged individually for the purpose of changing the individual, to a *quality of inquiry* when it functions to engage subjective experiencing as a means of an intelligent reconstruction of social situations from conditions of functional fragmentation (unstable entropic state) to conditions of functional integration (sustainable entropic state). In this way, Dewey's concern to

12. David Lloyd, Miguel A. Aon, and Sonia Cortassa, "Why Homeodynamics, Not Homeostasis?," *The Scientific World Journal* 1 (2001): 133–45, <https://doi.org/10.1100/tsw.2001.20>.

reconstruct philosophy into an embodied practice of critical social inquiry can be advanced by integrating his pragmatism with mindfulness and the new, emerging paradigm of life-mind.

Chapter Overview

Chapter one will introduce the mindfulness movement in education and discuss the issues with engaging mindfulness through a modern subjectivist paradigm. Assuming this paradigm of mind leads scholars and practitioners to start with the premises that 1) mind is an internal, mental phenomenon contained within and primarily generated and possessed by antecedently existing individuals; 2) experience (inclusive of emotion and cognitive processes like analytic thinking) is a personal, internal phenomenon, primarily or exclusively possessed by individual subjects; and 3) therefore, mindfulness-based interventions should be employed in and function by helping individuals adjust their internal experiences to the obdurate, objective conditions of the external world.

The issue here is that this theoretical rendering of mind, the individual subject, and experience enables the neoliberalization of mindfulness. This is the core of what many scholars have recently critiqued as the “McMindfulness” phenomenon, which is the tendency to engage mindfulness in such a way that placates individuals in the face of distressing conditions but does not support or encourage tangibly changing those social conditions prompting the need for mindfulness in the first place. Although a growing number of scholars in recent years have sought to employ mindfulness in socially-engaged ways, these efforts nonetheless retain the modern subjectivist metaphysical-theoretical paradigm of mind and are therefore limited in their ability to effect sustainable and substantive socially revolutionary change. To effect such change requires revising the underlying conception of mind operative in the mindfulness movement and education generally. This yields Dewey’s theories of emergent mind and inquiry, which render

mind as, primarily and ultimately, the operation of social organizations understood as self-organizing emergent wholes – that is, autopoietic unities. Therefore, “mindful” inquiry is inquiry based on Dewey’s theory of mind as a holistic, emergent functional quality of social systems. This shifts the conceptualization of mindfulness practices from an individually engaged activity to a means of engaging subjective mind as an emergent, transactional function of social systems.

Chapter two begins the explication of Dewey’s theories of emergent mind and inquiry. This chapter discusses the process ontological paradigm at the heart of Dewey’s naturalistic pragmatism. I discuss the key differences between the process ontological and substance ontological paradigms and how these differences are crucial for questions and practices of mind and inquiry. After summarizing the basic view of reality characteristic of a process ontological paradigm, I discuss what Dewey claims to be the three key metaphysical premises underlying the mind-body problem: “the denial of quality in general to natural events; the ignoring in particular of temporal quality and the dogma of the superior reality of ‘causes’” (LW1:194). The first point is elucidated through the process ontological paradigm that understands all existences as qualitative events. The second two points are elucidated by discussing the autopoietic view of life animating Dewey’s bioevolutionary naturalism. Chapter three introduces and details the autopoietic theory of life as developed within Dewey’s pragmatism. Connecting autopoiesis with the process ontology described in chapter two, I explain how living systems are defined constitutively as functionally emergent, transactional events.

Chapters two and three lay the groundwork for explaining Dewey’s conceptions of inquiry, mind, and subjective mind in chapter four. Here, I explain Dewey’s conception of subjective mind as an “agency of a novel reconstruction of a pre-existing order” (LW1:168) based on the functionally emergent constitution of “individual” qualities of the transactivity of

social organizations as autopoietic unities. After discussing these notions and how they interrelate, I explain how some sort of somatic exercise is necessary for engaging subjective mind in this reconstructive manner.

Chapter five integrates the content from chapters two, three, and four as a means of presenting my account of mindful inquiry. I explain what I mean by this term and then discuss how this approach differs from typical approaches to mindfulness-based interventions (MBIs) in education. As a case study, I discuss the growing issue of student stress and demonstrate how a mindful inquiry approach to stressful situations differs fundamentally from standard MBIs in the contemporary mindfulness movement. A concluding section discusses general implications for education, pedagogy, and further research.

Chapter One: The Mindfulness Movement

Introduction: The Rise of Mindfulness Studies

Research on mindfulness is one of the fastest-growing trends in academic scholarship and educational practice over the past few decades. The origins of this mindfulness movement in the academic West can be traced to Jon Kabat-Zinn’s development of the Mindfulness Based Stress Reduction (MBSR) program at the University of Massachusetts Medical Center in 1979.¹³ In the years following the launch of the MBSR program, growth of academic and scholarly interest in mindfulness was slow. Beginning in the late 1990s, however, rates of research and publication on mindfulness began growing exponentially.¹⁴

Today, mindfulness and a host of related phenomena – such as contemplative pedagogy (Zajonc 2013), transformative education (Lopez & Olan 2019), spirituality and education (Lin, Oxford, & Culham 2016), the postsecular (Lewin 2016), and affective pedagogy (Hyland 2011) – enjoy widespread scholarly attention in the form of professional organizations such as the Mind and Life Institute¹⁵ and the Association for Contemplative Mind in Higher Education,¹⁶ in journals such as *Mindfulness*¹⁷ and the *Journal of Contemplative Inquiry*¹⁸; campus-based mindfulness centers such as the Contemplative Collaborative at Syracuse University¹⁹ and the Mindful Awareness Research Center at UCLA²⁰; and even minors, majors, and graduate

13. Kabat-Zinn, “Mindfulness-based Interventions in Context,” 148.

14. Williams and Kabat-Zinn, “Introduction,” 2.

15. “Mission,” Mind & Life Institute, accessed June 1, 2020, <https://www.mindandlife.org/mission/>.

16. “The Association for Contemplative Mind in Higher Education | The Center for Contemplative Mind in Society,” accessed June 1, 2020, <http://www.contemplativemind.org/programs/acmhe>.

17. “Mindfulness,” Springer, 2020, <https://www.springer.com/journal/12671>.

18. “The Journal of Contemplative Inquiry | The Center for Contemplative Mind in Society,” accessed June 1, 2020, <https://www.contemplativemind.org/journal>.

19. “Contemplative Collaborative | Syracuse University,” accessed June 1, 2020, <http://hendricks.syr.edu/services-and-initiatives/contemplative-collaborative.html>.

20. “About UCLA’s Mindful Awareness Research Center (MARC),” accessed June 1, 2020, <https://www.uclahealth.org/marc/about-marc>.

programs of study focused on contemplative inquiry and mindfulness studies.²¹ Despite – or, perhaps as a result of – this widespread interest in mindfulness, this nascent field remains splintered along several key issues. Ultimately, as discussed below, mindfulness has been so hastily adopted by scholars and practitioners across a wide range of disciplines and contexts that there is nothing close to a consensus on what “mindfulness” really is, or even what criteria should be used in the determination of a definition of mindfulness.

Key Issues in Mindfulness Studies

Parallel to the rapid increase in mindfulness research is a rush to apply mindfulness as an antidote to a wide range of issues and programs in education. Terry Hyland reports that “mindfulness has become something of a boom industry over the last few decades, [resulting in] a massive global expansion of interest in mindfulness-based interventions (MBIs) in a diverse range of domains including work in schools, prisons, workplaces and hospitals, in addition to wide applications in psychology, psychotherapy, education and medicine.”²² Educational theorists and practitioners have sought to leverage mindfulness in the amelioration or support of all sorts of educational challenges and competencies such as students’ stress (Van de Weijer-Bergsma et al. 2014), attention (Ergas 2017), mental well-being (Bamber 2016), physical well-being (Cullen 2011), creativity (Capurso, Fabbro, & Crescentini 2013), executive function (Moore & Malinowski 2009), and academic performance (Bakosh et al. 2016). In addition, an increasing number of scholars and practitioners are recommending mindfulness and/or contemplative pedagogy as effective supports for anti-oppression pedagogy and social justice education (Berila 2016, 2020; Rendón 2014; Thompson 2017).

21. “Contemplative Degree Programs and Concentrations | The Center for Contemplative Mind in Society,” accessed June 1, 2020, <https://www.contemplativemind.org/resources/study>.

22. Terry Hyland, “On the Contemporary Applications of Mindfulness: Some Implications for Education,” *Journal of Philosophy of Education* 49, no. 2 (2015): 170-71.

Despite this widespread deployment of MBIs in education, Hyland cautions that “there has been very little analysis of either the philosophical underpinnings of [mindfulness] or of its implications for education.”²³ As a result, the field is mired in a host of debates about the proper conceptualization, application, and evaluation of MBIs in educational settings. The educational application of mindfulness is further complicated by the fact that there is widespread disagreement about how to characterize and define mindfulness *in general*. In fact, there is nothing close to a consensus in the literature on what defines “mindfulness” as such, or even how a standard definition could be reached.²⁴ For example, while there is widespread recognition that the general concept of mindfulness stems from Buddhist traditions,²⁵ there are simultaneously widely divergent perspectives on the delimitations of Buddhism. John Dunne concisely captures this dilemma:

The Buddhist tradition is not monolithic: Buddhism exhibits great diversity in its philosophies, meditation techniques, institutional structures, political roles, cultural expressions and numerous other features. Some scholars have even suggested that, in contemporary academic contexts, it is highly misleading to use the single term ‘Buddhism’ to describe these diverse manifestations in cultures as divergent as India, Sri Lanka, Vietnam, Nepal, Tibet, Korea, China, Japan, North America and so on. The well-substantiated claim here is that any attempt to speak in the singular of ‘Buddhism’ necessarily obscures actual diversity in philosophy and practice by masking it with our own, particular notion of what ‘Buddhism’ in the singular might be.²⁶

Evan Thompson echoes this analysis, suggesting that debates over the authenticity of modern Buddhism compared to classical Indian Buddhism are ultimately intractable: “such appeals to ‘authenticity’ are unsustainable, for Buddhism is and always has been a constantly evolving

23. Hyland, “On the Contemporary Applications of Mindfulness,” 170.

24. See, for instance, the wide range of perspectives in the collection edited J. Mark G. Williams and Jon Kabat-Zinn, *Mindfulness: Diverse Perspectives on its Meaning, Origins and Applications* (New York: Routledge, 2013).

25. Alberto Chiesa, “The Difficulty of Defining Mindfulness: Current Thought and Critical Issues,” *Mindfulness* 4 (2013): 255.

26. John Dunne, “Toward an Understanding of Non-dual Mindfulness,” in *Mindfulness: Diverse Perspectives on its Meaning, Origins and Applications*, eds. J. Mark G. Williams and Jon Kabat-Zinn (New York: Routledge, 2013), 71-72.

tradition.”²⁷ Georges Dreyfus concurs, explaining that “Buddhism is a plural tradition that has evolved over centuries to include a large variety of views about mindfulness.”²⁸ Mary Sykes Wylie likewise explains that “there has never been just one Buddhism, but a welter of Buddhist practices, organizations, ways of life, and opinions in a never-very-centralized tradition that's moved from India to China to Burma, Japan, and finally the West, picking up accretions along the way. Whatever anybody said about Buddhism, somebody else could say the opposite.”²⁹

Defining an Elusive Concept: The Vagueness of Mindfulness as a Catch-all Term

In the academic literature and professional engagement with mindfulness today, “mindfulness” is so variously defined and practiced that the term has effectively been stretched to meaninglessness. As discussed below, even the original meaning and usages of the term are contested by Buddhist scholars. Coupled with this inconsistent etymology, the rapid adoption of mindfulness by laypeople and professionals across all social contexts has created a situation in which “mindfulness” has been so generalized as to effectively refer to little more than “living with intention” or “focusing on what you are doing.”

In an article discussing the etymology of the construct “mindfulness,” Rupert Gethin traces the origin of the term to T.W. Rhys Davids’ 1881 translation of the Pāli *sati* (Sanskrit *smṛti*) from the Pāli Canon, the most complete collection of scriptures in the tradition of Theravada Buddhism.³⁰ Davids translated *sati* as “mindfulness,” though the Sanskrit term can also be taken to mean remembrance, memory, recollection, reminiscence, thinking of or upon, or

27. Evan Thompson, “Introduction to the Revised Edition,” in *The Embodied Mind: Cognitive Science and Human Experience* (Cambridge, MA: MIT Press, 2016), xxiii.

28. Georges Dreyfus, “Is Mindfulness Present-Centered and Non-Judgmental? A Discussion of the Cognitive Dimensions of Mindfulness,” *Contemporary Buddhism* 12, no. 1 (2011): 42.

29. Mary Sykes Wylie, “The Mindfulness Explosion: The Perils of Mainstream Acceptance,” *Psychotherapy Networker* 39, no. 1 (2015): 9.

30. Rupert Gethin, “On Some Definitions of Mindfulness,” *Contemporary Buddhism* 12, no. 1 (2011): 263-79.

calling to mind.³¹ Emphasizing that *sati* can also connote “attention,” some scholars have suggested that the best English translation is “self-possession.”³² This diversity in translation is further complicated by the fact that, as Gethin notes, “we cannot be sure quite what considerations led Rhys Davids to choose this word [‘mindfulness’], since so far as I know he nowhere reveals them.”³³

This lack of consensus on the very terminological meaning of and translation criteria for “mindfulness” is reflected in the very wide range of derivative conceptual meanings and practices offered under the vague rubric of “mindfulness.” One of the most common definitions of mindfulness is based on Jon Kabat-Zinn’s description as formulated through his Mindfulness-Based Stress Reduction program: “Mindfulness is awareness that arises through paying attention, on purpose, in the present moment, non-judgmentally.”³⁴ This “attentional” characterization features in most definitions of mindfulness.³⁵ Nonetheless, the very notions of “attention” and “awareness” are likewise defined in a wide variety of ways. Van Gordon et. al., for instance, culled from a review of the literature five types of Buddhist meditative awareness:

concentrative meditation (also referred to as sustained attention, absorption, focused attention; variously regarded as synonymous with or central to mindfulness); Shamatha meditation; insight/vipassana meditation; mindfulness meditation (alternatively present moment awareness or moment-by-moment awareness); open awareness (bare attention, choiceless awareness, unconstructed awareness, non-judgmental awareness, detached observation).³⁶

31. Gethin, “On Some Definitions of Mindfulness,” 263.

32. Windy Dryden and Arthur Still, “Historical Aspects of Mindfulness and Self-Acceptance in Psychotherapy,” *Journal of Rational-Emotive and Cognitive Behavior Therapy* 24, no. 1 (2006): 18.

33. Gethin, “On Some Definitions of Mindfulness,” 263.

34. “Jon Kabat-Zinn: Defining Mindfulness,” *Mindful*, January 11, 2017, <https://www.mindful.org/jon-kabat-zinn-defining-mindfulness/>.

35. J. David Creswell, “Mindfulness Interventions,” *Annual Review of Psychology* 68 (2017): 493.

36. William Van Gordon, et. al., “There is Only One Mindfulness: Why Science and Buddhism Need to Work Together,” *Mindfulness* 6 (2015): 49-50.

Despite such studies that attempt to thematize and specify a representative definition or list of criteria for identifying what is mindful, it remains the case that “each definition of mindfulness is rooted in a particular scholastic and practice tradition and must be understood from within that context.”³⁷ Given the vagueness of virtually every term involved in any given definition of mindfulness, a truly daunting and diverse range of practices has been clustered under the umbrella term “mindfulness.”³⁸ The upshot is clear: “the word ‘mindfulness’ is itself so vague and elastic that it serves almost as a cipher into which we can read virtually anything we want.”³⁹

Indeed, a wide variety of individual, interpersonal, and collective practices have been clustered under the heading of “mindfulness” (and/or sometimes “contemplative” practices).

Here is just a sample of some of these practices:

- “The MBSR protocol includes both practices from Buddhism, such as breathing, sitting, walking, eating meditation, body scanning, and gentle stretching (i.e., yoga), and western psychological approaches, such as psychoeducation, group discussions, and individual support. Body-oriented practices (e.g., body scanning, mindful eating and walking, and yoga stretching) are quite substantive and are used throughout the eight-session program. Home exercises include intensive meditative/bodily practices and listening to audio instructions...”⁴⁰
- Mindful reading, listening and viewing; concentration exercises; emotional balance exercises; beholding a work of art; visualization; silence; empathy, compassion, and loving kindness practice; analytical and settled meditation; and meditative movement such as yoga, tai chi, qigong, authentic movement, eurythmy, and contemplative dance.⁴¹
- Meditation, yoga, labyrinth walking, music, singing, dance, vigils, marches, journaling, and retreats.⁴²

37. Jordan T. Quaglia et al., “From Conceptualization to Operationalization of Mindfulness,” in *Handbook of Mindfulness: Theory, Research and Practice*, Kirk W. Brown, J. David Creswell, and Richard M. Ryan, eds. (New York: Guilford, 2015), 152.

38. Bassam Houry et al., “Embodied Mindfulness,” *Mindfulness* 8 (2017): 1160.

39. Bhikkhu Bodhi, “What Does Mindfulness Really Mean? A Canonical Perspective,” in *Mindfulness*, eds. J. Mark G. Williams and Jon Kabat-Zinn (New York: Routledge, 2013), 22.

40. Houry et al., “Embodied Mindfulness,” 1163.

41. Arthur Zajonc, “Contemplation in Education,” in *Handbook of Mindfulness in Education: Integrating Theory and Research into Practice*, ed. Kimberly A. Schonert-Reichl and Robert W. Roeser (New York, NY: Springer, 2016), 23.

42. Maia Duerr, “The Tree of Contemplative Practices | The Center for Contemplative Mind in Society,” accessed May 5, 2020, <http://www.contemplativemind.org/practices/tree>.

Yoga, meditation, and breathing exercises are among the most common somatic practices employed in MBIs. As an exemplary case, Julieta Galante et al. describe a “pragmatic randomized controlled trial” conducted at the University of Cambridge, UK.⁴³ In their study, 616 students were randomly assigned to one of two groups. The first group was the control, who only had access to the typical mental health support available on campus. The second group was the experimental group, who had access to the usual mental health support but were also enrolled in an 8-week Mindfulness Skills for Students course. The study’s aim was to “assess whether provision of mindfulness courses to university students would improve their resilience to stress.”⁴⁴ The mindfulness program was led by certified mindfulness teachers, and included the following range of practices:

The eight, weekly sessions lasted 75–90 min. Sessions included mindfulness meditation exercises, periods of reflection and inquiry, and interactive exercises. Students were encouraged to also practise at home. The recommended home practise time varied throughout the course, starting at 8 min and increasing to about 15–25 min per day. Home practise included meditations from the course book’s audio files and other mindfulness practices, such as a mindful walk, mindful eating, and habit breakers. Before and after each class, students received a generic email from the mindfulness teacher with relevant materials.⁴⁵

Following the course, student self-reports of distress levels indicated that 57% of students in the control (only the usual mental health support) group “had distress scores above an accepted clinical threshold” whereas 37% of the students in the experimental (usual mental health support plus Mindfulness Skills for Students course) group reported levels of distress above the threshold.⁴⁶

43. Galante et al., “A mindfulness-based intervention,” 72.

44. Galante et al., 73.

45. Galante et al., 74.

46. Galante et al., 72.

A similar study published in 2019 likewise investigated the effects of a “six-week yoga and meditation intervention on college students’ stress perception, anxiety levels, and mindfulness skills.”⁴⁷ The mindfulness program consisted of a weekly 60-minute vinyasa flow yoga class followed by a guided meditation led by trained faculty in a college of pharmacy. Various meditative practices were facilitated, including “walking meditation and Shamatha (peaceful abiding).”⁴⁸ The study’s authors found that over the course of the program, students experienced a moderate decrease in perceived levels of stress and anxiety, concluding that “administrators should consider including instruction in nonpharmacologic stress and anxiety reduction methods, within curricula in order to support student self-care.”⁴⁹

In chapter five, I will discuss in more detail such typical approaches to MBIs in education and the limitations of this approach to student stress. I cite these two studies here to highlight two features of MBIs as standardly employed in educational settings. First, specific practices such as yoga and meditation are assumed to be inherently “mindful.” Second, and following from the first assumption, stress is conceptualized as an individual experience logically entailing a solution based on increasing students’ individual resilience to such experiences of stress and anxiety. Below, I discuss how these assumptions are rooted in a modern subjectivist paradigm of life-mind and the dilemmas attendant to such an approach in the current sociopolitical context of Western culture.

Mindfulness in the Modern Paradigm: The Individual-Subjective-Internal Emphasis

Despite the diversity of definitions and practices described in the literature, the vast majority of research and practice in the contemporary mindfulness movement assumes two

47. Virginia Lemay, John Hoolahan, and Ashley Buchanan, “Impact of a Yoga and Meditation Intervention on Students’ Stress and Anxiety Levels,” *American Journal of Pharmaceutical Education* 83, no. 5 (2019): 747.

48. Lemay, Hoolahan, and Buchanan, 748.

49. Lemay, Hoolahan, and Buchanan, 747.

interrelated themes that have significant implications for how mindfulness is engaged in education. These are the assumptions that 1) mindfulness is primarily or exclusively an individual-internal-mental phenomenon; and 2) that, derivatively, mindfulness is a matter of improving skills having to do with self-regulation, personal coping, and individual resilience. This individual-inner conception is often taken as definitional of mindfulness. Kabat-Zinn writes that “mindfulness is basically just a particular way of paying attention. It is a way of looking deeply into oneself in the spirit of self-inquiry and self-understanding.”⁵⁰ Similarly, Deborah Orr summarizes that “mindfulness techniques involve being well-seated...turning one’s focus of attention inward; and observing without engaging with them one’s ideas, emotions, and sensations as they arise.”⁵¹ Likewise, Daniel Siegel, Madeleine Siegel, and Suzanne Parker suggest that an inward-focused practice is “fundamental” to mindfulness: “the fundamental viewpoint we are expressing is that the neural mechanisms beneath self-awareness and other-awareness harness similar circuitries. When we focus attention on the internal world of ourselves, we use a process that can be called internal attunement. Such attunement is fundamental to mindfulness practice.”⁵²

Assuming that mindfulness is an internal, mental process or practice engaged by an individual supports an approach to mindfulness interventions in education that emphasize skills such as self-regulation, coping, and resilience. For example, the Mind and Life Education Research Network (MLERN), which is housed within the Mind and Life Institute, was formed for the purpose of “exploring issues at the intersection of mind, brain, education and

50. Kabat-Zinn, *Full Catastrophe Living*, 12.

51. Deborah Orr, “The Uses of Mindfulness in Anti-oppressive Pedagogies: Philosophy and Praxis,” *Canadian Journal of Education* 27, no. 4 (2002): 492.

52. Daniel Siegel, Madeleine Siegel, and Suzanne Parker, “Internal Education and the Roots of Resilience: Relationships and Reflection as the New R’s of Education,” in *Handbook of Mindfulness in Education: Integrating Theory and Research into Practice*, Kimberly A. Schonert-Reichl and Robert W. Roeser, eds. (New York: Springer-Verlag, 2016), 47-64.

contemplative practice.”⁵³ Upon the formation of MLERN, a variety of scholars, researchers, clinicians, and practitioners were tasked with developing a statement describing the uses of mindfulness and contemplative practice in contemporary education. The resultant white paper, *Contemplative Practices and Mental Training: Prospects for American Education*, summarizes their aim thusly:

Drawing upon research in neuroscience, cognitive science, developmental psychology and education, as well as scholarship from contemplative traditions concerning the cultivation of positive development, we highlight a set of *mental skills* and socio-emotional dispositions that we believe are central to the aims of education in the 21st century. These include *self-regulatory skills* associated with emotion and attention, self-representations, and prosocial dispositions such as empathy and compassion. These positive qualities and dispositions can be strengthened through systematic contemplative practice. Such practice induces plastic changes in brain function and structure, supporting prosocial behavior and academic success in young people.⁵⁴

This emphasis on mental training and individual skills is reflected in popular mindfulness curricula such as the MindUP Curriculum created by the Goldie Hawn Foundation and published by Scholastic. The MindUP website explains that “this research-based curriculum features 15 lessons that use the latest information about the brain to dramatically improve behavior and learning for all students.”⁵⁵ The focus of mindfulness is clearly on the individual student: “Each lesson offers easy strategies for helping students focus their attention, improve their self-regulation skills, build resilience to stress, and develop a positive mind-set in both school and life.”⁵⁶

This emphasis on the individual self is reflected in much scholarly discussion of mindfulness. Qianguo Xiao et al., for instance, recently published a critical survey of Buddhist

53. “Mind and Life Education Research Network,” Mind and Life Institute, accessed February 3, 2020, <https://www.mindandlife.org/legacy-programs/mlern/>.

54. Mind and Life Education Research Network.” (Emphasis added.)

55. “MindUP Curriculum” | Scholastic.com. Accessed May 5, 2020, <http://teacher.scholastic.com/products/mindup/index.html>.

56. “MindUP Curriculum” | Scholastic.com. Accessed May 5, 2020, <http://teacher.scholastic.com/products/mindup/index.html>.

and western psychological conceptions of the self, noting that mindfulness has been studied in relation to self-compassion, self-acceptance, self-perspective change, self-consciousness, self-concept, self-construction, and self-referential processing, among other “self-oriented” phenomena.⁵⁷ In these and similar studies, there remains the unquestioned assumption that there simply *is* an individual, and/or a self, and that this given individual is the subject and site of mindfulness. This assumption no longer holds in the newly emerging paradigm of mind, however, and as discussed throughout chapters two, three, and four, Dewey’s process ontology fundamentally redefines “the individual” (and subjects, selves, etc.) as well as “mind.”

The assumption of a “ready-made...self-sufficing individual” (LW1:134) is at the core of the modern subjectivist view of mind that Dewey rejects. He explains that “there is an easy way by which thinkers avoid the necessity of facing a genuine problem. It starts with a self, whether bodily or spiritual being immaterial for present purposes, and then endows or identifies that self with mind, a formal capacity of apprehension, devising and belief” (LW1:169). This is the approach characteristic of most mindfulness research and practice as well as most psychological and cognitive science research generally. Assuming the ontological independence of “the individual” and reducing mind to the brain results in what Michael Lifshitz and Evan Thompson call the “mindful brain” or “neurocentric” view of meditation.⁵⁸ Chapters two, three and four detail how and why Dewey rejects these tenets of mind and ontology. After presenting Dewey’s theory of emergent mind, I will return to a discussion of mindfulness-based interventions in

57. Qianguo Xiao et al., “The Mindful Self: A Mindfulness-Enlightened Self-view,” *Frontiers in Psychology* 8 (2017): 2-3.

58. Michael Lifshitz and Evan Thompson, “What’s Wrong with ‘The Mindful Brain’? Moving Past a Neurocentric View of Meditation,” in *Casting Light on the Dark Side of Brain Imaging*, eds. Amir Raz and Robert T. Thibault (Cambridge, MA: Academic Press, 2019), 123-28.

education in chapter five. There, I compare the typical approach to MBIs with Dewey's alternative approach to life-mind and inquiry.

The Sociopolitical Context of Mindfulness: Neoliberalism and McMindfulness

The specific, technical issues underpinning MBIs in contemporary educational settings must be understood within the large-scale, sociopolitical nature of the mindfulness movement based on the modern paradigm of mind. I suggest that two of the key issues in the field – whether mindfulness is a secular or spiritual practice and the phenomenon of mindfulness serving to support a neoliberal, capitalist sociopolitical-economic ideology, i.e. “McMindfulness” – are intimately linked and are both rooted in the modern subjectivist view of mind and the individual. I will survey these issues and then propose that these dilemmas are manifestations of the underlying assumptions about life and mind, which is to say that they stem from the same basic issues that Dewey emphasized as undergirding the intractable debates about mind-body relations. Following this, I discuss how Dewey's pragmatic approach – characterized by his method of empirical naturalism – provides a fundamentally different way to conceptualize and engage mindfulness. This will anticipate the in-depth explication of Dewey's autopoietic process pragmatism in chapters two, three and four, which in turn establishes the basis from which I offer my Deweyan critique of MBIs in education in the final chapter.

Two of the key issues in the field of mindfulness studies are the question of the secular or spiritual nature of mindfulness and the effects of engaging mindfulness within a sociopolitical milieu of neoliberal capitalism. As I will explain further below, my purpose in introducing these issues is not to take a normative stand on potential solutions by aligning with a position currently represented in the literature but, instead, following Dewey's strategy, to *dissolve* (or at least side-

step) them by offering an alternative approach to conceptualizing and engaging the somatic practices characteristic of the mindfulness movement.

Jon-Kabat Zinn, for instance, strongly leans toward a secular interpretation of Buddhist mindfulness as a “universal generative grammar...[which is] neither a belief, an ideology, nor a philosophy.”⁵⁹ He explains that the Buddhist notion of “dharma” can be interpreted without substantial religious or spiritual qualities and thereby universalized as a secular practice that anyone from any culture or religious tradition can practice without needing to become officially or formally Buddhist: “Although...mindfulness meditation is most commonly taught and practiced within the context of Buddhism, its essence is universal. Mindfulness is basically just a particular way of paying attention.”⁶⁰ Conversely, many Buddhist scholars and practitioners maintain that mindfulness practices such as meditation are intrinsically spiritual in nature;⁶¹ therefore, without a foundation in the substantively ethical and spiritual tradition of Buddhism, “mindfulness becomes just another fashionable self-help gimmick that is unlikely to be of any lasting individual or social benefit.”⁶²

Representing the traditionalist end of the spectrum, Ronald Purser and Joseph Milillo lament that contemporary manifestations of mindfulness have little to do with its Buddhist origins and the ethically substantive notion of “right mindfulness” in classical Buddhist tradition.

They explain that

A Buddhist-based conceptualization of right mindfulness provides both a theoretical and ethical corrective to the decontextualized individual-level construct of mindfulness that has informed the organizational theory and practitioner literature. We argue that a denatured mindfulness divorced from its soteriological context reduces it to a self-help

59. Kabat-Zinn, “Mindfulness-based Interventions in Context,” 145.

60. Kabat-Zinn, *Full Catastrophe Living*, 12.

61. Tim Lomas, “Recontextualizing Mindfulness: Theravada Buddhist Perspectives on the Ethical and Spiritual Dimensions of Awareness,” *Psychology of Religion and Spirituality* 9, no. 2 (2017): 209-19.

62. Hyland, “McDonaldizing Spirituality,” 334.

technique that is easily misappropriated for reproducing corporate and institutional power, employee pacification, and maintenance of toxic organizational cultures.⁶³

Taking a more equanimous and synthetic approach, Van Gordon et al. propose that classical Buddhist and contemporary scientific conceptions of mindfulness can be fruitfully integrated; they critique the critique offered by Buddhist traditionalists and allow for a modernized, secularized mindfulness to be as legitimately “authentic” as classical conceptions.⁶⁴ And at the end of the spectrum opposite the traditionalists, Shauna Shapiro, Ronald Siegel, and Kristin D. Neff argue that “although the concept of mindfulness is most often associated with Buddhism, its phenomenological nature is embedded in most religious and spiritual traditions, as well as in Western philosophical and psychological schools of thought. Mindfulness is a universal human capacity that transcends culture and religion.”⁶⁵

The debate about the spiritual or secular nature of mindfulness is tied directly to one of the other main issues in the field, hinging on the neoliberal manifestation of mindfulness. Among an increasing array of scholars from a range of disciplines, Ronald Purser and David Forbes have been among the most vocal critics of what Miles Neale in 2011 termed the “McMindfulness” phenomenon.⁶⁶ In a recently published book, Purser provides a systematic explanation and critique of McMindfulness, which is used as a heuristic to describe the wide range of issues attending the rapid commodification, marketing, and consumption of mindfulness in neoliberal socioeconomic contexts.⁶⁷ As David Harvey defines it, neoliberalism is “a theory of political

63. Ronald Purser and Joseph Milillo, “Mindfulness Revisited: A Buddhist-Based Conceptualization,” *Journal of Management Inquiry* 24, no. 1 (2015): 3.

64. William Van Gordon, Edo Shonin, Mark Griffiths, and Nirbhay Singh, “There is Only One Mindfulness: Why Science and Buddhism Need to Work Together,” *Mindfulness* 6 (2015): 49-56.

65. Shauna Shapiro, Ronald Siegel, and Kristin D. Neff, “Paradoxes of Mindfulness,” *Mindfulness* 9 (2018): 1963.

66. Miles Neale, “McMindfulness and Frozen Yoga: Rediscovering the Essential Teachings of Ethics and Wisdom,” 2011. Retrieved on 11/13/2019 from <https://www.milesneale.com/video/mcmindfulness-and-frozen-yoga>.

67. Purser, *McMindfulness* (London: Repeater, 2019).

economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade.”⁶⁸ One aspect of this discussion concerns whether mindfulness is properly practiced as a purely individual, personal pursuit or whether it entails a commitment or imperative to engage in sociopolitical change or even revolution. Those such as Purser who believe mindfulness does have an inherent ethical concern for effecting social change decry the neoliberalization of the practices. Conversely, other scholars and practitioners claim that mindfulness as such does not require any such ethically or socially normative application, but rather has always adopted an ethically-relative or neutral function and meaning practically relative to the contingent socioeconomic conditions in which it is practiced.⁶⁹

The confluence of mindfulness and neoliberalism has resulted in the pathologizing and privatizing of distress and the correlate application of mindfulness as an individualized therapeutic tool to manage one’s personal experiences in the face of difficult situations. As Purser explains,

A fundamental tenet of neoliberal mindfulness [is] that the source of people’s problems is found in their heads. This has been accentuated by the pathologizing and medicalization of stress, which then requires a remedy and expert treatment — in the form of mindfulness interventions⁷⁰... Mindfulness, like positive psychology and the broader happiness industry, has depoliticized and privatized stress.⁷¹

In an article discussing how this manifests in school-based applications of mindfulness, James Reveley identifies the same tendency:

68. David Harvey, *A Brief History of Neoliberalism* (New York: Oxford University Press, 2007), 2.
 69. Mary Sykes Wylie, “The Mindfulness Explosion: The Perils of Mainstream Acceptance,” *Psychotherapy Networker* 39, no. 1 (2015): 1–11.
 70. Purser, *McMindfulness*, 38.
 71. Purser, *McMindfulness*, 11.

Among neoliberalism's ideological correlates are personal autonomy, self-reliance, and responsibility for one's own well-being. [I argue] that mindfulness meditation fulfills this function; it is a practical technique that transmits the neoliberal self-responsibilizing impulse down to young people.⁷²

Intentionally or otherwise, "school-based mindfulness training," Reveley argues, "tightens what [William] Connolly calls 'the subjective grip of neoliberalism.'"⁷³ This leads to an uncritical engagement with mindfulness in education as little to nothing more than a therapeutic self-help technique that serves to bolster students' ability to cope with the distressing conditions they face in schools and in society generally. Without an explicit, critical exploration of the sociopolitical and institutional conditions surrounding and influencing the classroom experience, mindfulness can ironically function to maintain the conditions involved in students' stressful experiences rather than helping to eliminate those conditions:

Schools teach children to handle problems by self-pacifying. The issue is how they react, not the conditions to which they react. ...Mindfulness could be an empowering and emancipatory practice, exploring ways to change social conditions and priorities. Instead, it maintains the status quo. Students are taught to meditate away their anger and accept their frustrations (nonjudgmentally, of course). This might help them focus on work, but unless they also learn about the causes of stress in social, economic and institutional structures, links between education and democracy are severed.⁷⁴

David Forbes echoes this analysis, critiquing what he contends is the naïve assumption that simply turning mindfully inward is enough to achieve inner peace in the midst of distressing social conditions. Rather, such inward-focused mindfulness practices

ironically reinforce the value and social structure of an individualistic, alienating society. [This has] led proponents to use mindfulness as an instrument to gain self-centered skills in stress-reduction, self-promotion, self-enhancement, hedonic happiness, and corporate profits and productivity over the common good. By encouraging people to look solely to themselves and to look within, in alignment with neoliberal values, they have allowed

72. James Reveley, "Neoliberal Meditations: How Mindfulness Training Medicalizes Education and Responsibilizes Young People," *Policy Futures in Education* 14, no. 4 (2016): 498.

73. Reveley, 498.

74. Purser, *McMindfulness*, 184-85.

mindfulness to contribute to a therapeutic adjustment toward an unhealthy society within schools, corporations, the workplace, the military, and elsewhere.⁷⁵

McMindfulness, in short, secularizes and individualizes mindfulness practices in accordance with competition-based every-person-for-oneself neoliberal market imperatives and in the process severs the practice from any substantively social, collective, or tradition-based engagement. Ronald Purser and David Loy summarize the situation thusly:

Uncoupling mindfulness from its ethical and religious Buddhist context is understandable as an expedient move to make such training a viable product on the open market. But the rush to secularize and commodify mindfulness into a marketable technique may be leading to an unfortunate denaturing of this ancient practice, which was intended for far more than relieving a headache, reducing blood pressure, or helping executives become better focused and more productive.

While a stripped-down, secularized technique...may make it more palatable to the corporate world, decontextualizing mindfulness from its original liberative and transformative purpose, as well as its foundation in social ethics, amounts to a Faustian bargain. Rather than applying mindfulness as a means to awaken individuals and organizations from the unwholesome roots of greed, ill will and delusion, it is usually being refashioned into a banal, therapeutic, self-help technique that can actually reinforce those roots.⁷⁶

I suggest that both of these major debates are manifestations of the persistence of the modern subjectivist paradigm of mind and the metaphysics embedded in that paradigm. The neoliberalization of mindfulness today can be read as just the latest manifestation of Western culture's response to social problems through the modern subjectivist paradigm. Dewey explains that

every type of culture has experienced resistance and frustration. These events are interpreted according to the bias dominating a particular type of culture. To the modern European mind they have been interpreted as results of the opposed existence of subject and object as independent forms of Being. The notion is now so established in tradition that to many thinkers it appears to be a datum, not an interpretative classification. (LW1:184)

75. David Forbes, *Mindfulness and Its Discontents: Education, Self, and Social Transformation* (Black Point, Nova Scotia: Fernwood, 2019), 12.

76. Ron Purser and David Loy, "Beyond McMindfulness," HuffPost, July 1, 2013, https://www.huffpost.com/entry/beyond-mcmindfulness_b_3519289.

Modern subjectivism generally, and Romanticism specifically, hypostatizes the functional nature of individualized experience into a primordial, ontologically-independent Self by “convert[ing] this historic, relative and instrumental status and function [of individualized experience] into something absolute and fixed” (LW1:184). As discussed in depth in chapters two, three, and four, for Dewey the *quality of experience* that the modern paradigm names *the self, the individual, or subjective* is not a “substance” but a “pervasive and inevitable color and temper of experience” (LW1:187) which is discernible only as a contingent function of a unique social system manifesting unique qualities within a unique situation.

In other words, for Dewey, “a human individual is distinctive opacity of bias and preference conjoined with plasticity and permeability of needs and likings” (LW1:186). On the pragmatic approach, the inherent tension between these two “ultimate [and] ineradicable” (LW1:186) characters of existential events serves an instrumental function of reconstructing existential situations such that subjective desires “integrate with the movement of nature and by participation direct its consequences” (LW1:186). The modern, Romantic paradigm, however, in thinking that the individual quality of experience marks a “substance” which “exhausts the self, [creates] a vast and somnambulant egotism out of the fact of subjectivity” (LW1:187). Two divergent responses to problematic situations thereby follow: “It [the “irreducible uniqueness of an individual” (LW1:187)] may lead to restless insatiable throwing of the self into every opportunity of external business and dissipation in order to escape from it;” or,

It may be cherished, nurtured, developed into a cultivated consolatory detachment from the affairs of life, ending in the delusion of the superiority of the private inner life to all else, or in the illusion that one can really succeed in emancipating himself in his pure inwardness from connection with the world and society. (LW1:187)

It is this latter tendency that is manifest in neoliberalized mindfulness. Rather than using the tensional qualities definitional of (on Dewey's view) individual experience as means of tangibly reconstructing social-existential situations, such tension is avoided by retreat into "egoistical solitude" (LW1:188). Modern subjectivism, in converting the functional nature of individualized experience into antecedent existences set apart from the "objective, external" world, allows for the "exploitation of the inner life [as] a new, readily accessible and cheaply enjoyed esthetic field" (LW1:175). Purser identifies this very phenomenon in the neoliberalization of mindfulness: "With the retreat to the private sphere, mindfulness becomes a religion of the self."⁷⁷

In similar fashion, the debate about the secularity or sanctity of mindfulness can be read as an instance of what Dewey critiques as "*the philosophic fallacy*:" abstracting from the unified, functionally-integrated quality of immediate experience two aspects of that quality and then converting those abstractions into antecedent existences. In other words, defining mindfulness as secular *or* sacred through *a priori* ontological categorization puts the cart before the horse, in Dewey's view. As he explains in *A Common Faith*, the pragmatic approach denies that there is such "a thing" as religious experience, in the sense of a certain *type* of experience being intrinsically, inherently or necessarily religious (e.g., meditating or praying). Rather, *any* experience (e.g., praying, eating, swimming, gardening, coaching a soccer team, politically demonstrating, fixing a car, or solving mathematical equations) might come to have *religious quality* if it functions to bring about a "better adjustment in life and its conditions" (LW9:11), namely an increased "sense of security and peace" (LW9:10).

77. Purser, *McMindfulness*, 10.

Just as with Dewey's pragmatic criterion that qualifies any experience as "educative" based on its functional outcome within future experience, I suggest that the secularity or sacredness of mindfulness is a matter of how it functions in a given individual's or group's unique social situation and not a matter of intrinsic property or definition. This enables a critical evaluation of the contingent *uses* of mindfulness that allows such uses to be characterized for what they are relative to any given application. For instance, one can acknowledge the radical difference between using mindfulness to increase one's compassionate social awareness and empathetic capacities and using mindfulness to help one become a more accurate military sniper.

I contend that insofar as these debates about mindfulness continue in the absence of a fundamental reconstruction of the underlying conceptions of mind and life, the debates will persist, and their proposed solutions will proliferate without end. I am here drawing a parallel to Dewey's analysis of the mind-body problem and the countless proposed solutions to that problem throughout philosophy's history. As mentioned in the Introduction, Dewey cites a wide range of supposed "solutions" to the mind-body problem and explains that they all fail, but not because "the trouble lies...in the solutions. [...The trouble is] in the factors which determine statement of the problem" (LW1:194). In like manner, I suggest that the issues underlying the emergence of the McMindfulness phenomenon are based on the problematic premises of the modern subjectivist paradigm, and insofar as these premises are left unaddressed, the proposed solutions to these issues will not succeed.

As the literature engaging these dilemmas has rapidly proliferated, some scholars have noticed that this proliferation of proposed solutions has not solved the problems but rather further complicated them. Zack Walsh, for instance, describes this phenomenon by noting that

critics who employ Buddhist ethics to critique secular mindfulness assume a reactionary position that is fated to produce its own antithesis. Religiously based ethical critiques

produce deeper ideological trenches between critics and apologists, without advancing a process for their reconciliation, because by imposing an interpretive frame from outside, these critiques produce nothing but endless cycles of future critique between contrary religious and secular perspectives.⁷⁸

In like fashion, Wylie discusses how the concern that the entanglement of mindfulness with neoliberal, economic imperatives is ultimately based on an appeal to an illusory and abstract notion of a “pure” or ultimately “authentic” Buddhism.⁷⁹ As noted above, Buddhist scholars such as Evan Thompson suggest that “such appeals to ‘authenticity’ are unsustainable, for Buddhism is and always has been a constantly evolving tradition.”⁸⁰ Given this, it would be presumptuous to try to settle these debates in a mere few paragraphs or even many pages. Instead, I will discuss how Dewey’s pragmatic approach to such debates provides a fundamentally different way of addressing the issues and practically and functionally engaging the issues involved.

The Pragmatic Criterion: Determining Experiential Quality based on the Process-Autopoietic Theory of Life-Mind

Whether confronting the debates between traditionalists and progressives in schooling reform (LW13:3-62), the various approaches to solving the mind-body problem such as idealism or realism (LW1:20), or the relative virtues of liberal versus conservative political programs (LW9:76-80⁸¹), Dewey always sought to offer a unique and novel perspective rather than aligning himself with perspectives extant to the debates as he found them. This is characteristic of his pragmatic approach to social and intellectual problems, where there is a general pragmatic

78. Zack Walsh, “Mindfulness under Neoliberal Governmentality: Critiquing the Operation of Biopower in Corporate Mindfulness and Constructing Queer Alternatives,” *Journal of Management, Spirituality & Religion* 15, no. 2 (2018): 153.

79. Wylie, “The Mindfulness Explosion,” 1-11.

80. Evan Thompson, “Introduction to the Revised Edition,” in *The Embodied Mind: Cognitive Science and Human Experience* (Cambridge, MA: MIT Press, 2016), xxiii.

81. In his short essay “Imperative Need: A Radical New Party,” Dewey calls for “the immediate formation of a strong united radical third party” (LW9:80), as he saw both liberal and conservative political interests being dominated by financial capital, corporate industry, and business imperatives. In other words, here as everywhere, Dewey does not align himself with extant categories or established positions in debates; rather, he proposes a novel, third option based on a pragmatic analysis of the functional nature of the phenomena in question.

criterion of sorting through an issue that can be applied in any given context. This “pragmatic criterion,” I suggest, can only be properly understood (or at least understood and applied most comprehensively and effectively) in light of the process ontological, bioevolutionary basis of Dewey’s pragmatism. This is because the whole idea of Deweyan pragmatism, characterized by the “empirical method” or “empirical naturalism,” is to prioritize in debates not abstract analysis but the aconceptual⁸² somatic experiencing of the qualitative character of a problematic situation. In this section, I explain this approach and discuss how it offers a novel approach to the question of defining mindfulness in education.

In his major philosophical statement, *Experience and Nature*, Dewey explains the differences between his pragmatic, empirical method and the traditional method of analysis in philosophy – *a priori* or non-empirical method. In short, *a priori* analysis seeks to define a concept in the abstract according to necessary and sufficient conditions and criteria of internal logical coherence. The idea is to determine the meaning of some entity, existent, or event separate from the contingencies and variabilities of unique, concrete situations. Thus, for instance, this approach might define *table* as “a structural object made of rigid material and four vertical legs fastened to a flat, horizontal top surface.” The pragmatic approach, conversely, would allow anything to *be* “a table” if it satisfies a *functional* purpose or goal such as “a table is anything that prevents food from falling in one’s lap.” On this definition, a table need not have four legs, nor even be constructed from rigid material. A book, towel, laptop, cat, or laundry

82. For recent treatments of the notion of the “aconceptual mind,” see Daniel D. Hutto and Erik Myin, *Radicalizing Enactivism: Basic Minds without Content* (Cambridge, MA: The MIT Press, 2012); Michael D. Kirchhoff and Tom Froese, “Where There Is Life There Is Mind: In Support of a Strong Life-Mind Continuity Thesis,” *Entropy* 19, no. 4 (2017): 169–86; Joacim Andersson and Jim Garrison, “Embodying Meaning: Qualities, Feelings, Selective Attention, and Habits,” *Quest* 68, no. 2 (2016): 207–22; and Pauli Pylkko, *The Aconceptual Mind: Heideggerian Themes in Holistic Naturalism* (Philadelphia, PA: John Benjamins, 1998).

basket could “be a table” insofar as it *serves the function* pragmatically defining “a table.” I will return to this approach of functionally defining terms/phenomena in chapters three and four.

Dewey’s empirical method has no concern for *a priori* definitions. Rather, his pragmatic inquiry emphasizes “the primacy and ultimacy of gross experience” (LW1:24). The unique quality of a given – i.e. contingent – situation is somatically *felt*,⁸³ and this immediately-had experience then guides reflective thought as conceptual distinctions are introduced to help respond to that experience. When namings (i.e., terms such as “table,” “fear,” “danger,” “physical,” or “mental”) are introduced, these are not taken as symbols corresponding to antecedently-existing entities, objects, or existents in an external world but rather as guides for action aimed at changing the situation in some desirable way.⁸⁴ Empirical method, in other words, asks “*to what effect* the [symbolic] distinction is made: how the distinguished factors function in the further control and enrichment of the subject-matters of crude but total experience” (LW1:19; emphasis original). In contrast, *a priori* analysis starts with a conceptual abstraction as primary material: “non-empirical method starts with a reflective product as if it were primary, as if it were the originally ‘given’” (LW1:19).

I suggest that the contemporary mindfulness literature – and especially those analyses that seek to operationalize mindfulness – is characterized by what Dewey calls non-empirical method. Consider, for instance, the consistent concern of many scholars to construct an

83. Dewey’s philosophy is in remarkable concordance with Eugene Gendlin’s process-phenomenological system and somatic practice that centers on his notion of the “felt sense,” which I take to be more or less equivalent to Dewey’s qualitative, ineffable immediate experience. See Eugene T. Gendlin, *A Process Model*, Northwestern University Studies in Phenomenology and Existential Philosophy (Evanston, IL: Northwestern University Press, 2018).

84. For a recent elaboration of this thesis in relation to contemporary empirical findings from cognitive psychology and neuroscience, see H. Oğuz Erdin and Mark H. Bickhard, “Representing is Something That We Do, Not a Structure That We ‘Use’: Reply to Gładziejewski,” *New Ideas in Psychology* 49 (April 2018): 27–37, <https://doi.org/10.1016/j.newideapsych.2018.02.001>.

operationalized definition of mindfulness *prior to* a subsequent study or application of the “thing” – mindfulness – named by that definition:

One thing that the wide diversity of sometimes overlapping definitions makes plain is that unless and until a more thorough, precise, and comprehensive definition of mindfulness is formulated, it will be difficult to create protocols, scales, and instruments that properly and precisely measure its effectiveness.⁸⁵

Over the last several decades a tremendous amount of effort has been expended in an attempt to ascertain the exact meaning and nature of mindfulness. The question is important because as long as both the practice of mindfulness and the condition of ‘being mindful’ remain vaguely defined, the concept will be difficult to operationalize, test, and measure.⁸⁶

While for research purposes it is understandable to seek such an operationalized definition, as a general approach this is profoundly non-pragmatic in that the effort is based on an assumption that it is even possible to determine “the exact meaning and nature of mindfulness” in advance of a situationally-contingent experience. In other words, the literature is characterized by non-empirical method in that many scholars start with what Dewey calls a “reflective product” – i.e. *mindfulness* – as an originally given thing. I have not found a single article or study that begins with questioning the existential status of the “thing” (i.e. phenomenon, practice, event, experience, etc.) that is assumed to be denotatively named by the term “mindfulness.” This is effectively the inverse of the pragmatic approach. For Dewey, what anything “is” is a matter of *how it functions* in and for future experience. Or, more accurately, “is-ness” is a question of the *functional consequences* of action directed by conceptual-symbolic abstract namings, not a matter of any sort of “correspondence” between a naming (i.e., a term, concept, symbol, where

85. Håkan Nilsson and Ali Kazemi, “Reconciling and Thematizing Definitions of Mindfulness: The Big Five of Mindfulness,” *Review of General Psychology* 20, no. 2 (2016): 183.

86. Nilsson and Kazemi, 191.

these are taken to be mental constructs internal to an individual's mind) and an antecedently, independently-existing entity or event in the external world.⁸⁷

Dewey's naturalistic pragmatism offers a fundamentally different way to approach the question of "what mindfulness is." The general pragmatic criterion is to move away from asking *what* something is and to instead explore *how* a complex of activity functions in a given situation. More specifically, Dewey advocates his empirical naturalism as a means of moving beyond the many intractable debates featuring in traditional philosophical analysis, which debates he claims persist because of the abstract, *a priori* manner in which they are conducted. In short, an *a priori* analysis seeks to establish a definition of something separate from any individual's or group's contingent experience in a given context. The idea is that we must first determine what something is "as such" (i.e., independent of contingent variables and factors in the experience of that thing) and *then* we can study that thing in relation to the unique variables of a specific, concrete situation.

Dewey's empirical method effectively reverses this approach. The "starting point" of inquiry is always "gross experience [which is] loaded with the tangled and complex" (LW1:32) qualities of a unique situation, which most directly are experienced "immediately," by which Dewey means qualitatively and somatically, rather than conceptually or analytically. The direct *experience* of the situational quality of one's immediate environment then prompts reflective analysis, in which relevant conceptual terms are explicitly identified and discussed. But, the naming of some aspect of an experience in symbolic terms does not determine what something "is." For Dewey, "what" something "is" concerns *how* it functions – or, the effect produced – in a further immediately-had experience. Indeed, as I discuss further in chapter two, in process

87. See, e.g., Bickhard (1999; 2003a; 2003b; 2003c; 2009; 2015).

ontology, there literally is no difference between *what* and *how*; they are posited as wholly continuous with one another.

The scholarly literature debating *what* mindfulness is takes the *a priori* approach to defining mindfulness. Countless authors have constructed intricate and complex treatments supporting their preferred definition of what mindfulness is, with the assumption being that we cannot practice mindfulness without first defining it with a significant degree of specificity. Is it religious? Secular? Does it have ethical content? Is there one right way to do it? Does it require assent to specific spiritual, theological, cosmological, political, or doctrinal beliefs? Are there necessary steps and components that must be present for a practice to qualify as mindfulness? And so on.

The irony is that questions such as “Is mindfulness secular?” are effectively question-begging, because embedded in the form of the question is the assumption that there *is* – i.e. already exists – some “thing” called “mindfulness,” and that we know that this thing exists. Then, we ask about its defining characteristics; e.g., secular or religious. But how can we know what mindfulness *is* if we do not yet know if it “is” secular or religious? Starting with these questions leads to the intractable debates that Walsh identifies, and which Dewey witnessed in relation to questions of mind-body in his day. Dewey explains that the debates about mind-body, mind-world relations were intractable because they were based on the false premises that there *is* such a “thing” denoted by the term “mind,” and that this thing is – by *a priori* definition – *not* “the external world,” which is another thing defined, as such, as existing independently of mind. These premises “make the fact of knowledge both unnatural and unempirical,” Dewey claims (LW1:20). The questions animating scholarly discourse, however, uncritically assume the

premise that “mind” and “world” (or “mind” and “body”) are two separate things and thus the debates develop based on the implications of this assumption:

One thinker turns metaphysical materialist and denies reality to the mental; another turns psychological idealist, and holds that matter and force are merely disguised psychical events. Solutions are given up as a hopeless task, or else different schools pile one intellectual complication on another only to arrive by a long and tortuous course at that which naïve experience⁸⁸ already has in its own possession. (LW1:20)

As I detail in chapters two, three, and four, Dewey’s approach to overcoming these debates is to reject the validity of the premises and introduce a totally different way to conceptualize “defining” as such, or “is-ness.” Where the debates traditionally ask: “Is mind physical *or* mental?” Dewey would answer: “This is a practically unhelpful question. I am concerned with *what practical effect* obtains from naming any given immediately-had qualitative event ‘mind,’ ‘body,’ ‘physical,’ or ‘mental.’ ‘Mind’ refers to those *qualities* of events that serve a particular function in the maintenance of the life-process.”⁸⁹ Here, “is-ness” – i.e. nature of – is a matter of serving a function, where the nature and effect of such functioning is in turn relative to the characteristic activity of an enviroing medium, namely living systems. This is – in very skeletal and ironically abstract (see below) form – the basis of defining things according to a pragmatic criterion. As I explain below, empirical method shifts from asking and trying to determine what something *is* abstractly, in advance of a concrete experience, and instead allows

88. This reference to “naïve experience” is not insignificant. In fact, it is difficult to exaggerate the importance for Dewey’s pragmatism of what he variously calls naïve experience, “gross experience” (LW1:24), “immediate experience,” and “direct experience” (LW1:25). At the end of the first chapter of *Experience and Nature*, Dewey plainly states his ultimate goal in writing the book, which is not to solve traditional philosophical problems but to engender respect for immediate, “naïve” experience: “If what is written in these pages has no other result than creating and promoting a respect for concrete human experience and its potentialities, I shall be content” (LW1:41).

89. Obviously, this way of characterizing “mind” involves a certain definition of *life*. And, as I show below, Dewey’s definition of life requires and is based on a shift to a process ontology of such comprehensiveness that *all* relevant terms in these discussions are re-conceptualized; this includes *mind, life, cognition, thought/thinking, perception, communication, matter, causation, language, environment, stimulus/response, knowledge*, etc.

for *any* experience to *come to have* any number of qualities such as mindful quality, educative quality, or religious quality.

My goal in engaging mindfulness through a Deweyan pragmatic approach is to avoid contributing to what Walsh names as the “endless cycles of further critique” between dualistic perspectives premised on either/or definitions of things (e.g., is mindfulness secular *or* religious?). The pragmatic approach strives to avoid such endless cycles of critique by asking after the premises underlying the formulation of issues and positions in controversies. In *Experience and Education*, Dewey explains that “all social movements involve conflicts which are reflected intellectually in controversies” (LW13:3). Such controversies set a problem for philosophers of education, but the goal is not to resolve the controversies according to the terms of debate as manifest in the discourse around a social movement. Rather,

It is the business of an intelligent theory of education to ascertain the causes for the conflicts that exist and then, instead of taking one side or the other, to indicate a plan of operations proceeding from a level deeper and more inclusive than is represented by the practices and ideas of the contending parties. (LW13:3)

This is the approach I will take in my engagement with mindfulness in education. Just as Dewey responded to the debates about Traditional and Progressive educational ideals by proposing a pragmatic criterion of educative experience that served to elucidate the notion of “Education itself rather than...some ‘ism about education,” I will “call attention to the larger and deeper issues of Education” (LW13:4) in relation to the question of mindfulness in education.

The central issue concerning mindfulness and education, of course, is “mind.” By interpreting Dewey’s theories of mind and inquiry according to a process autopoietic perspective, I will develop the notion of “mindful inquiry” along the same pragmatic lines that Dewey developed his notion of “educative experience.” Dewey’s criterion for educative versus mis-educative experience is based on his understanding of learning and growth as biological

phenomena. He explains that there is no experience or subject-matter that is inherently – i.e., by *a priori* definition – educational (LW13:27). Instead, “everything depends upon the *quality* of the experience which is had” (LW13:13; emphasis original). If an experience functions to support the conditions for further growth in general rather than limiting growth in any way, it can be said to manifest educative quality.

In like manner, I will suggest that there is no experience, activity, or somatic practice that is inherently “mindful.” It all depends on the *consequences* or *effects* of an experience (LW1:20). In the case of inquiry based on the life-mind continuity thesis, if a function, experience, or practice serves to maintain conditions supportive of further inquiry, that experience or practice can be said to manifest “mindful” quality. This is because, as I will explain in chapters two, three, and four, Deweyan inquiry is an emergent, transactional function of mind defined as the autopoietic organizational dynamics of social systems. The purpose and function of inquiry, defined in this way, is to reconstruct disintegrated social situations (disintegrated mind) such that the system is “reintegrated” (LW12:40) into a functionally unified condition, where such a condition is a quality that obtains on the level of the social system as an emergent whole – i.e. the “fullness” of mind.

This pragmatic approach to “mindful inquiry” therefore offers a more complex and contingent approach to mindfulness in education. While Dewey’s theory of inquiry requires some sort of somatic exercise or activity given his theory of mind, the mere practice of any given somatic exercise (even including meditation or yoga) is not sufficient to qualify that practice as “mindful.” It is ultimately a matter of the *effect* of engaging such a practice, relative to a unique situational context, that determines whether the course of inquiry can be said to manifest “mindful quality.”

This differs significantly from the typical approach to mindfulness in education, which seeks first to determine, on the basis of an *a priori* definition, intrinsically mindful activities such as meditation, yoga, focused breathing, and the like. Having determined that such somatic practices are definitionally mindful, a mindfulness-based intervention takes the form of having students engage such practices, which have been determined as applicable and useful *in advance* of a given situation due to their being inherently mindful practices. The assumption here is that mindfulness, by definition, produces certain effects such as a reduction in stress. The trouble is that this is ultimately an empirical question and not an *a priori* analytic, definitional question. I will not endeavor to settle the empirical question here. Rather, my concern is to explore the conceptual assumptions underlying what seems to be this common-sense logic of defining specific practices as inherently mindful and mindfulness generally as inherently productive of specific effects. These conceptual assumptions, I am suggesting, include a set of ontological premises – concerning, among other things, mereological constitution, causality, and the temporal nature of existents – that underpin the modern subjectivist theory of life-mind and which seemingly yields a common-sensical understanding of the nature of mindfulness as a practice that, if engaged properly, will, for instance, by definition help to reduce a practitioner’s experienced levels of stress. My intention is to critically investigate these assumptions such that their seemingly common-sense implications are no longer so seeming.

Perhaps unfortunately, human experiencing is vastly more complex and the educational challenges – such as the epidemic of student stress, as I discuss in chapter five – that an increasing number of scholars, teachers, and administrators are trying to solve through mindfulness cannot be so easily resolved, so I am claiming. At best, current approaches to MBIs in education might temporarily, and to a moderate degree, help students cope with difficult

situations.⁹⁰ At worst, they might function – unintentionally, to be sure – to reify the very problematic conditions they are seeking to redress.

A functional, pragmatic approach to defining mindfulness is akin to a functional definition of “table,” per above. Non-empirical method begins by enumerating the intrinsic characteristics of a thing *as* that thing (i.e., this is an *a priori*, “as such” definition). Thus, for example, a table is an object made of rigid material with four legs, a top, etc. Or, for example, mindfulness is a practice of sitting silently, paying attention to one’s breath, allowing thoughts to come and go without judgement, etc. Empirical method, conversely, prioritizes a *functional outcome* as the criterion for determining whether a given experience or event is *qualified* in a certain way. Thus, an event⁹¹ can be said to have a quality of “tableness” if it serves the function of preventing food from falling in one’s lap. Just so, mindfulness as a “thing” cannot be named in advance of a given situational experience. Thus, *any* experience or activity might come to have “mindful quality” if it functions to help reconstruct a situation from a functionally disintegrated to a functionally integrated state.

I acknowledge that I have here put the cart before the horse, so to speak, in summarizing the conclusion of my argument prior to presenting the components necessary for building my case. I offer that this is unavoidable at least to a degree due to the inherently ironic dilemma in the very nature of this project: namely, the fact that my dissertation takes the form of an abstract, analytical presentation of the thesis that abstract, analytical presentations of things is un-pragmatic. This dilemma plagues Dewey’s presentation of his philosophy, as well, and he

90. Dana Carsley, Bassam Khoury, and Nancy L. Heath, “Effectiveness of Mindfulness Interventions for Mental Health in Schools: A Comprehensive Meta-Analysis,” *Mindfulness* 9 (2018): 693-707.

91. In chapter two, I discuss how a process ontology speaks only in terms of goings-ons, active happenings (such as events, activities, occurrences, processes) rather than static things, objects, entities, or particles as the basic “stuff” of reality. This is utterly crucial for properly understanding Dewey’s pragmatism. Without this ontology in place, this entire discussion of pragmatic criteria referring to functional outcomes makes no sense.

acknowledged this at the beginning of *Experience and Nature*. Introducing his pragmatic approach to questions of mind, world, and experience, he explains that

I know of no route by which dialectal argument can answer such objections. They arise from associations with words and cannot be dealt with argumentatively. One can only hope in the course of the whole discussion to disclose the meanings which are attached to “experience” and “nature,” and thus insensibly produce, if one is fortunate, a change in the significations previously attached to them. (LW1:10)

The key to understanding Dewey’s empirical method, and pragmatism generally, is the autopoietic process ontology inherent in his understanding of life and mind. Without this, his method can very ironically be misinterpreted as just another *a priori* statement of abstract criteria, methods, and values. But this is wholly ironic, because this is precisely what Dewey seeks to avoid in recommending his empirical method. The irony of Dewey abstractly describing his empirical method of prioritizing concrete qualitative experience over abstract analysis should not be taken as reason for the dubiousness of the method he describes, however (due to the inconsistency and seemingly self-critiquing nature of the presentation of the thesis), but as revealing precisely the problem with *a priori*, abstract statements about life-mind-experience naturalistically defined. That is, Dewey’s empirical method explicitly claims that “what is” cannot, in principle, be determined or stated in advance of an event’s occurrence, because what something “is” is how it functions in the context of a particular, diachronically-developing field of events or the effect had in and for future experience, which can only be determined through direct, immediate, qualitatively-felt experience of a situation following an action prompted or guided by analytic-reflective thought. The irony, of course, is that Dewey is effectively saying, in abstract, *a priori* terms, “empirical method is rejecting the possibility of saying what anything is in abstract, *a priori* terms.”

Dewey was well aware of this seeming self-contradiction in his position. In his essay “Qualitative Thought,” he explains that

The foregoing remarks are intended to suggest the significance to be attached to the term ‘qualitative thought.’ But as statements they are propositions and hence symbolic. Their meaning can be apprehended only by going beyond them, by using them as clues to call up qualitative situations. *When an experience of the latter is had and they are re-lived,* the realities corresponding to the propositions laid down may be *had*. (LW5:252; emphasis added)

It is easy to overlook what Dewey admonishes here. Nowhere does Dewey say that his goal is to get people to (conceptually) *understand* his position. Rather, he is recommending the conceptualization and engagement of philosophy as an embodied practice, as a *course of action* that will lead one to *have* an experience of their own that demonstrates the very qualitative process – somatically experienced – that he is propositionally describing. In the *Logic* he discusses this at length in terms of “universes of experience” and “universes of discourse.” Universes of discourse (i.e., symbolic, propositional statements such as this sentence) exist within universes of experience, but not the other way around.

A universe of experience is the precondition of a universe of discourse. ... The universe of experience surrounds and regulates the universe of discourse but never appears as such within the latter. It may be objected that what was previously said contradicts this statement. For we have been discoursing about universes of experience and situations, so that the latter have been brought within the domain of symbols. The objection, when examined, serves to elicit an important consideration. It is a commonplace that a universe of discourse cannot be a term or element within itself. One universe of discourse may, however, be a term of discourse within *another* universe. The same principle applies in the case of universes of experience.

The reader, whether he agrees or not with what has been said, whether he understands it or not, *has*, as he reads the above passages, a uniquely qualified experienced situation, and his reflective understanding of what is said is controlled by the nature of that immediate situation. One cannot decline to *have* a situation for that is equivalent to having no experience, not even one of disagreement. The most that can be refused or declined is the having of that *specific* situation in which there is reflective recognition (discourse) of the presence of former situations of the kind stated. This very declination is, nevertheless, identical with initiation of another encompassing qualitative experience as a unique whole. In other words, it *would* be a contradiction if I attempted to

demonstrate by means of discourse, the existence of universes of experience. It is not a contradiction by means of discourse to *invite* the reader to have for himself that kind of an immediately experienced situation in which the presence of a situation as a universe of experience is seen to be the encompassing and regulating condition of all discourse. (LW12:74-75; emphasis original)

In other words, for Dewey's pragmatic philosophy, to "understand" something precisely is to immediately *have* a certain sort of somatically felt, qualitative experience. This is the logical conclusion of the autopoietic view of life-mind-cognition. Humberto Maturana and Francisco Varela, who first systematically developed the autopoietic view, came to precisely the same conclusion: "nothing we are going to say will be understood in a really effective way unless the reader feels personally involved and *has a direct experience* that goes beyond all mere description."⁹²

I explicate this at length because I believe this captures the great irony attendant the debates about "what mindfulness is." Dewey recommended his empirical method – which emphasizes the primacy *and* ultimacy of immediately-had, non-discursive experience – as the means by which to move beyond the intractable debates that have plagued philosophers for centuries. He recommended this approach precisely because he saw that the enabling condition for "endless cycles of...critique" in scholarly debates, as Walsh says, is engaging inquiry purely – or even just primarily – on the level of "universes of discourse." Dewey's theory of embodied, emergent mind requires an inversion of the modern subjectivist approach to inquiry: inquiry begins in, is guided by, and culminates in – endlessly, continuously – somatically felt qualitative experience. Dewey is clear: "Discourse that is not controlled by reference to a [qualitatively-unified] situation is not discourse, but a meaningless jumble" (LW12:74). The unique quality of

92. Humberto Maturana and Francisco Varela, *The Tree of Knowledge: The Biological Roots of Human Understanding* (Boston, MA: Shambala, 1992), 18. Emphasis added.

a situation that prompts, directs, and regulates discursive inquiry is the necessary existential context for enabling knowledge to be meaningful (LW1:29).

The irony in contemporary mindfulness literature, then, is that the scholarly discourse is quite literally un-mindful in the sense that it is guided by reference to terms from other “universes of discourse,” as Dewey says, rather than being guided by the somatic experiencing of particular, concrete situations. This is the mechanism at play in Dewey’s concern that trendy social programs and reforms can unintentionally “increase the disease in the means used to cure it” (LW1:225). This study is an attempt to apply Dewey’s pragmatic, empirical method to the question of mindfulness in education such that a “new order of conceptions” – the process autopoietic theory of life-mind – can lead to “new modes of practice” – an education that is intrinsically, inherently “mindful” – what I am calling mindful inquiry (LW13:3).

Chapter Two – Dewey’s Process Pragmatism

Introduction: Life, Mind, and Inquiry as Process

This chapter discusses the importance of ontology for the paradigm shift in the mind sciences, for Dewey’s pragmatism, and for the mindfulness movement. In the first section, I highlight the centrality of ontology and the mind-body issue in Dewey’s reconstruction of philosophy. I emphasize why a revised ontology is crucial for moving beyond modern subjectivism and embracing the new paradigm of mind as developed through the project of process philosophy. I then discuss how and why Dewey is directly relevant to mindfulness. Even though very few scholars have yet connected Dewey with mindfulness,⁹³ I suggest that among all 20th century philosophers, Dewey is the most relevant and helpful for the task of constructing a critical, social mindfulness. In the second section, I explicate Dewey’s process ontology and discuss the necessity of ontology for understanding Dewey’s theories of mind and inquiry. In discussing Dewey’s process ontology in relation to the tradition of substance metaphysics, I am not suggesting that Dewey’s views are to be taken as *the* right or true metaphysical-ontological system. Rather, the intent in contrasting process with substance metaphysics is to show how and why Dewey’s process ontology is so important for properly understanding the paradigm shift in the mind sciences and truly overcoming the intractable debates attendant the modern subjectivist view of mind and life. Because no other scholar has yet explicitly discussed Dewey’s ontology as of the processual variety, I take pains to emphasize the differences between the process approach and the more common substance metaphysical paradigm. Without a clear enumeration of the specific and general differences here, Dewey’s reconstruction of philosophy, mind and

93. Kyle A. Greenwalt and Cuong H. Nguyen, “The Mindfulness Practice, Aesthetic Experience, and Creative Democracy,” *Education and Culture* 33, no. 2 (2017): 49-65.

inquiry can easily be misread by being interpreted according to the terms of a paradigm he expressly intended to leave behind. Ultimately, the goal is to show how and why this paradigm shift should be considered as essential for developing a critical, social mindfulness, and how and why Dewey's pragmatism is best suited to this task.

Mind as an Individual Mental Faculty to Mind as Emergent Social Function: From Modern Subjectivism to Process Philosophy

It is difficult to overestimate the importance of Dewey's concern to fundamentally redefine the notion of "mind" in his pragmatic reconstruction of philosophy. Specifically, Dewey's primary concern is to replace the "traditional separation of nature and experience" with his "idea of continuity" (LW1:9). Entailed in this is a rejection of the mind-body duality characteristic of the "modern subjectivism" (LW1:168) with which Dewey contrasts his "'emergent' theory of mind" (LW1:207). The mind-body duality, in Dewey's estimate, is one of the worst offenses of the dualistic tradition in Western thought:

I do not know of anything so disastrously affected by the tradition of separation and isolation as is this particular theme of body-mind. In its discussion are reflected the splitting off from each other of religion, morals and science; the divorce of philosophy from science and of both from the arts of conduct. The evils which we suffer in education, in religion...in the materialism of business and the aloofness of 'intellectuals' from life, the whole separation of knowledge and practice:—all testify to the necessity of seeing mind-body as an integral whole. (LW 3:27)

Dewey does not simply reject the *duality*, however, and subsequently argue for mind being *either* mental (cf. idealism) *or* physical (cf. realism) – or any other sort of monism. Rather, he rejects the entire ontological framework that begins with the assumption that "physical body/matter" and/or "mental mind/thought" are unproblematically given existential phenomena. Such partitioning of reality-experience is characteristic of modern subjectivism. The ontology here posits two distinct types of reality: mental and physical (LW1:23-24). The philosophical puzzles associated with the assumption that reality is split between physical and mental

substance are well known; these include various renditions of the mind-body problem,⁹⁴ the “hard problem of consciousness,”⁹⁵ the “harder problem of consciousness,”⁹⁶ the “even harder problem of consciousness,”⁹⁷ how knowledge is supposed to “represent” reality,⁹⁸ and related questions of the ostensible “relation between” an immaterial, internal mind as mental process and a material, external world of antecedently-existing physical objects.

Dewey’s strategy in addressing the mind-body problem is not to solve it, however. Instead, he endeavors to show that it is a false problem based on a set of mistaken metaphysical assumptions. In *Experience and Nature*, he explains that the countless proposed solutions to the mind-body problem all fail precisely because they uncritically assume that there actually is a mind-body problem in the first place:

The formalism and unreality of the problem remains, however, in the theories which have been offered as its ‘solutions.’⁹⁹ They range from the materialism of Hobbes, the apparatus of soul, pineal glands, animal spirits of Descartes, to interactionism, pre-established harmony, occasionalism, parallelism, pan-psychic idealism, epiphenomenalism, and the *élan vital*—a portentous array. The diversity of solutions together with the dialectical character of each doctrine which renders it impregnable to empirical attack, suggest that the trouble lies not so much in the solutions, as in the factors which determine statement of the problem. If this be so, *the way out of the snarl is a reconsideration of the conceptions in virtue of which the problem exists. And these conceptions have primarily nothing to do with mind-body; they have to do with underlying metaphysical issues* [emphasis added]:—the denial of quality in general to natural events; the ignoring in particular of temporal quality and the dogma of the superior reality of ‘causes.’ (LW1:194)

94. Evan Thompson, *Mind in Life: Biology, Phenomenology, and the Sciences of Mind* (Cambridge, MA: Harvard University Press, 2007), 6-7.

95. David Chalmers, “The Hard Problem of Consciousness,” in *The Blackwell Companion to Consciousness*, eds. Max Velmans and Susan Schneider (Malden, MA: Blackwell, 2007), 225-235.

96. Ned Block, “The Harder Problem of Consciousness,” *The Journal of Philosophy* 99, no. 8 (2002): 391-425.

97. Tim S. Roberts, “The Even Harder Problem of Consciousness,” *NeuroQuantology* 5, no. 2 (2007): 214-221.

98. See Bickhard (2015a, 2015b).

99. Since Dewey wrote this, countless further solutions (none of which has been fully satisfactory) have been developed. Rupert Read more recently makes the same claim as Dewey, arguing that “the ‘hard’ problem of consciousness is continually reproduced and made harder by all attempts to solve it.” Read, “The ‘Hard’ Problem of Consciousness is Continually Reproduced and Made Harder by All Attempts to Solve It,” *Theory, Culture and Society* 25, no. 2 (2008): 51.

Despite Dewey's explicit assertion that a revised metaphysics is needed to do away with the mind-body problem, philosophers and scientists of mind continue to assume that there *is* such a problem and attempt to solve it through contrived strategies that Dewey critiqued as counterproductive. Primary among these is the search for the "neural correlates of consciousness," an effort alive and well in the cognitive and neurosciences today, including in studies of mindfulness.¹⁰⁰ Indeed, in an article discussing the origins and development of Mindfulness-Based Stress Reduction (MBSR), Jon Kabat-Zinn – founder of the MBSR program and arguably the scholar-practitioner most influential in putting mindfulness on the radar of Western scientists, medical professionals, and academics¹⁰¹ – rhapsodizes about findings from neuroimaging studies that demonstrate correlations between brain activity and meditative experience, directly equating (or, more accurately, *conflating*) mental states with neurological activity.¹⁰² Countless related examples could be cited, including neuroscientific studies purporting to isolate the "neural mechanisms" responsible for individuals' spiritual experiences.¹⁰³

Dewey saw through this ruse to solve "problems" of consciousness via the identification of neural correlates, however:

To suppose that there are inherently marked off different forms of awareness corresponding to the distinction arrived at by technical analysis is as flagrant a case of hypostatizing¹⁰⁴ as can be found (LW1:251);

100. Fadel Zeidan, "The Neurobiology of Mindfulness Meditation," in *Handbook of Mindfulness: Theory, Research and Practice*, Kirk W. Brown, J. David Creswell, and Richard M. Ryan, eds. (New York: Guilford, 2015), 171-89.

101. Terry Hyland, "McDonaldizing Spirituality: Mindfulness, Education, and Consumerism," *Journal of Transformative Education* 15, no. 4 (2017): 335.

102. Jon Kabat-Zinn, "Mindfulness-Based Interventions in Context: Past, Present, and Future," *Clinical Psychology: Science and Practice* 10, no. 2 (2003): 147.

103. Lisa Miller et al., "Neural Correlates of Personalized Spiritual Experiences," *Cerebral Cortex* 29, no. 6 (2019): 2331-38.

104. For Dewey, hypostatization – the "conversion of eventual functions into...antecedent existence[s]" – constitutes "*the* philosophic fallacy" (LW1:34). Showing the origins and issues with this fallacy and providing

As far as it is assumed that modes of consciousness are in themselves already differentiated into sensory, perceptual, conceptual, imaginative, retentive, emotional, conative...physiological study will consist simply of search for the different bodily and neural processes that underlie these differences. *The outcome is an exacerbation of the traditional mind-body problem.*” (LW1:256-57; emphasis added)

Rupert Read more recently echoes Dewey’s assessment of the dilemma inherent in trying to solve the problems attendant the assumption of a mind-body duality, such as the problem of consciousness: “the ‘hard’ problem of consciousness is continually reproduced and made harder by all attempts to solve it.”¹⁰⁵

That researchers are still looking for the neural correlates of specific forms of consciousness such as spirituality and mindfulness demonstrates their continuing dedication to the modern subjectivist paradigm of mind, and many contemporary scholars have lamented that this paradigm still lingers in the mind sciences today. Tom Froese and Ezequiel Di Paolo recently remark that most research in the cognitive sciences proceeds through a “methodological individualism” that implicitly or explicitly regards mind and cognition as a property or faculty of individual subjects.¹⁰⁶ Stephen W. Porges, pioneering neurophysiological researcher and originator of the Polyvagal Theory of the vagus nerve, discusses how “the current scientific solutions of dualism are not solutions, but merely objective descriptions of parallel functions with exquisite technologies. Many scientists and disciplines are stuck in the dualism trap.”¹⁰⁷

Rupert Read likewise acknowledges that most scholars in the psychological sciences and philosophy of mind are held “captive” by the modern cognitivist (Cartesian dualist) paradigm of

means of avoiding it comprises a large part of Dewey’s reconstruction of philosophy, as discussed throughout the dissertation.

105. Rupert Read, “The ‘Hard’ Problem of Consciousness is Continually Produced and Made Harder by All Attempts to Solve It,” *Theory, Culture and Society* 25, no. 2 (2008): 51.

106. Tom Froese and Ezequiel A. Di Paolo, “Sociality and the life-mind continuity thesis,” *Phenomenological Cognitive Science* 8 (2009): 441.

107. Stephen W. Porges, *The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication, and Self-Regulation* (W. W. Norton, 2011), 2-3.

mind-body, mental-physical separation.¹⁰⁸ In a similar vein, Alan Jurgens and Michael Kirchhoff report that cognitivism still dominates much theory and research in the sciences of mind, including treatments of social and intersubjective cognition.¹⁰⁹ Alan Costall affirms these analyses, explaining that modern cognitive psychology remains committed to ontological dualism but that this should be jettisoned in favor of the evolutionary, functionalist psychologies of William James, Dewey, and George Herbert Mead.¹¹⁰

This modern subjectivist view of mind has manifested in the study and practice of mindfulness in the form of what Michael Lifshitz and Evan Thompson call the “mindful brain” or “neurocentric” view of meditation.¹¹¹ In this approach, mindfulness is reduced to a distinct mental component isolable to neural processes; the “neural correlates of mindfulness,” as it were. Thompson laments that “the result is an individualistic conception of the mindful person, superimposed onto a biological substrate. ...Mindfulness is conceptualized as inside the individual mind, while the mind is taken to be fundamentally the brain. As a result, we come to think of ourselves, especially our mental lives, through the reified construct of the ‘mindful brain.’”¹¹² This “individualistic conception of the mindful person” plays a key role in what many scholars have recently critiqued as the “McMindfulness” phenomenon within the mindfulness movement.¹¹³ Secularized and commodified to fit easily into a neoliberal sociopolitical milieu,

108. Read, “The ‘Hard’ Problem of Consciousness,” 51-86.

109. Alan Jurgens and Michael D. Kirchhoff, “Enactive Social Cognition: Diachronic Constitution and Coupled Anticipation,” *Consciousness and Cognition* 70 (2019): 1–10.

110. Alan Costall, “From Darwin to Watson (and Cognitivism) and Back Again: The Principle of Animal-Environment Mutuality,” *Behavior and Philosophy* 32, no. 1 (2004): 179–95.

111. Michael Lifshitz and Evan Thompson, “What’s Wrong with ‘The Mindful Brain’? Moving past a neurocentric view of meditation, in *Casting Light on the Dark Side of Brain Imaging*, eds. Amir Raz and Robert T. Thibault (Cambridge, MA: Academic Press, 2019), 123-28

112. Evan Thompson, “Looping Effects and the Cognitive Science of Mindfulness Meditation,” in *Meditation, Buddhism, and Science*, David L. McMahan and Erik Braun, eds. (New York: Oxford University Press, 2017), 50.

113. Ronald Purser, *McMindfulness: How Mindfulness Became the New Capitalist Spirituality* (London: Repeater, 2019).

McMindfulness “divorces mindfulness from its spiritual and ethical origins in Buddhist traditions.”¹¹⁴

Despite the fact that Dewey consistently and directly critiqued the modern subjectivist view of mind that posits a “self-sufficing individual” (LW1:134) “endow[ed]...with mind [as] a formal capacity of apprehension, devising and belief” (LW1:169; see also LW1:19-21, 23-24, 145, 168-71, 177, 183; LW3:36; LW12:29, 40, 43), even Dewey scholars have retained this subjectivist, mental model of mind in their commentary on various aspects of his pragmatism. This misreading manifests in the mentalizing of thought, inquiry, and mind and a neglect of the qualitative dimension of Deweyan inquiry, which, as some Dewey scholars recently claim, is the most radical yet least understood aspect of Dewey’s account of inquiry.¹¹⁵ As discussed below, I contend that such misreadings of Dewey and mindfulness are fundamentally rooted in a neglect of the metaphysical premises operative in the modern conception of life and mind-body.

Dewey’s Radical Reconstruction of Inquiry: The Life-Mind Continuity Thesis, Process Metaphysics, and Process Philosophy

The tendency to retain the modern subjectivist paradigm of mind in mindfulness studies as well as interpretations of Deweyan inquiry stems in each case from a neglect of the fundamentally different metaphysics operative in the emerging paradigm of mind. There is an irony here, but it is understandable. The irony is that the new metaphysical paradigm requires a rejection of the psychological-mental conception of mind, cognition, and thought. But for the modern paradigm, this is tantamount to a rejection of these phenomena *as such*. In other words,

114. Hyland, “McDonaldizing Spirituality,” 334.

115. See Gregory Pappas, “John Dewey’s Radical Logic: The Function of the Qualitative in Thinking,” *Transactions of the Charles S. Peirce Society* 52, no. 3 (2016): 435-468; and Mark Johnson, “Cognitive Science and Dewey’s Theory of Mind, Thought, and Language,” in *Cambridge Companion to Dewey*, ed. M. Cochran (Cambridge: Cambridge University Press, 2013), 123-144.

the very discipline of psychology as a field of study is premised on the constitutive identification of mind, cognition and thought *as mental* phenomena, which definition entails the necessity of a correlate scholarly discipline – the psychological sciences – created expressly for the purposes of studying these phenomena, which other disciplines by definition have no concern with (LW1:23-24). If this mentalistic conception of mind is rejected, psychology as such goes out the window, and the door is open to the reductionistic treatment of mental phenomena as nothing more than the behavior of mindless, physical material. In other words, technically speaking, it does not make sense for scholars in the psychological sciences to fully embrace the new paradigm from within their field, as the new paradigm – in its fullest expression – entails a fundamental redefinition of “mind” and therefore a reconstituting of the forms of inquiry engaged to study mind.

Dewey, in fact, *does* assert the superfluous nature of psychology (LW16:63) but he *does not* thereby fall into the materialistic-reductionistic trap as the only alternative to a mind-body dualism. The key to understanding Dewey’s alternative approach – his “‘emergent’ theory of mind” – is to understand the robust *process ontology* at the core of his pragmatism. The metaphysical component of Dewey’s pragmatism has historically been a point of contention. This is because, as I detail below, the distinction between a substance metaphysical paradigm and a process metaphysical paradigm is rarely explicitly acknowledged. As a result, metaphysics *qua* metaphysics is conflated with an *a priori, substance-based* approach to metaphysics. Insofar as this is how metaphysics is defined, scholars like Charlene Haddock Seigfried are right to claim that Dewey did not have a metaphysics¹¹⁶ *in that sense of metaphysics*. As Sidney Hook notes, “no one can reasonably dispute the assertion that [Dewey] did not hold [the traditional]

116. Charlene Haddock Seigfried, “Ghosts Walking Underground: Dewey’s Vanishing Metaphysics,” *Transactions of the Charles S. Peirce Society* 40, no. 1 (2004): 53-81.

conception of the nature of metaphysics.”¹¹⁷ There is a basic fallacy, however, in claiming that because Dewey did not develop a metaphysical system *in the traditional style* he therefore totally rejected metaphysics: this claim neglects any alternative approach to metaphysics and ontology, namely the process ontological (or, more generally, the process philosophical) paradigm, as detailed below.

There is a parallel neglect of the importance of metaphysics in the emerging field of mindfulness studies. Despite a growing recognition among mindfulness scholars that a paradigm shift is needed and can be advanced through the study and practice of mindfulness, the metaphysical component of this shift is obviated by the obstinate assumption that reality is split between physical and mental orders, with mind pertaining to the mental order and the physical, therefore, excluding mentality. The result is a discussion of the paradigm shift purely in terms of epistemology. For instance, in their introduction to an edited volume on the origins and meaning of mindfulness, J. Mark G. Williams and Jon Kabat-Zinn discuss the matter as a confluence of “two different epistemologies...two different ways of knowing, that of western empirical science, and that of the empiricism of the meditative or consciousness disciplines and their attendant frameworks, developed over millennia.”¹¹⁸ By only naming epistemology in this equation – there is no discussion of metaphysics or ontology in the entire volume – Williams, Kabat-Zinn, and the book’s contributors demonstrate that they do not appreciate the wholesale, metaphilosophical nature of the paradigm shift developing in the mind sciences. The Springer

117. Sidney Hook, “Introduction,” in *The Later Works, 1925-1953*, Vol. 1: 1925: *Experience and Nature*, ed. Jo Ann Boydston (Carbondale, IL: Southern Illinois University Press, 2008), vii.

118. J. Mark G. Williams and Jon Kabat-Zinn, “Introduction,” in *Mindfulness: Diverse Perspectives on Its Meaning, Origins and Applications*, eds. J. Mark G. Williams and Jon Kabat-Zinn (New York: Routledge, 2013), 3-4.

*Handbook of Mindfulness*¹¹⁹ and *Handbook of Mindfulness in Education*¹²⁰ likewise give no attention to metaphysics or ontology and only a few paragraphs in the *Wiley Blackwell Handbook of Mindfulness* mention ontology (and, in this latter case, the mention is a highly general and mere *mention* of ontology as concerned with “being;” there is no substantive discussion of any major or even minor metaphysical paradigms).¹²¹

I suggest that the primary hurdle to understanding the centrality of metaphysics in the paradigm shift occurring in the mind sciences is a lack of recognition of the mutually constitutive nature of the *metaphysical* and *metaphilosophical* levels of the shift. In other words, the shift entails not merely a change in the specialized content of metaphysics as a distinct research discipline, separate from the specialized content of other, supposedly metaphysics-independent disciplines such as psychology and biology; the shift in metaphysics entails a shift in the very nature of inquiry, toward a re-integration of research disciplines that were originally unified but then separated in the modern period, and even relativizing the distinction between empirical and theoretical sciences.¹²² As just one example of this, in a discussion of a process ontologically-

119. Ronald E. Purser, David Forbes, and Adam Burke, eds., *Handbook of Mindfulness: Culture, Context, and Social Engagement* (Switzerland: Springer, 2016).

120. Kimberly A. Schonert-Reichl and Robert W. Roeser, eds., *Handbook of Mindfulness in Education: Integrating Theory and Research into Practice*, 1st ed. (New York: Springer, 2016).

121. Sayyed Mohsen Fatemi, “Exemplifying a Shift of Paradigm: Exploring the Psychology of Possibility and Embracing the Instability of Knowing,” in *The Wiley Blackwell Handbook of Mindfulness*, eds. Amanda Ie, Christelle T. Ngnoumen, and Ellen J. Langer (Malden, MA: John Wiley and Sons, 2014), 115-138.

122. This, at least, was Dewey’s goal. He described his pragmatic philosophy as “empirical naturalism” (LW1:4) and by deriving his philosophy from the empirical results of biology (Nungesser 2017) sought to show that all specialized inquiries share a common functional pattern in that as abstract discourses, they all (at least potentially, depending on how they are used) serve to guide direct action in an existential situation in need of change. This is what Dewey means by the “arts of conduct;” the “art” refers to the creative conjunction of the conceptual and abstract with the existential material of tangible situations, where the conceptual serves to guide the process of reconstructing a situation from an indeterminate or uncertain quality to a more settled, integrated quality (LW1:67). For Dewey, the “objects of science...are an order of relations which serve as tools to effect immediate havings and beings” (LW1:110); they do not “disclose the inner nature of things” or describe antecedently-existing objects or existences (LW1:6). So, it is not that science objectively describes reality and other disciplines do not; for Dewey, all specialized inquiries or “special sciences” (his term for “research disciplines;” LW1:14) function to guide behavior in a particular existential-transactional domain. Common sense and scientific inquiry, Dewey says, both have for their material the same existential events-experiences (“myth and science concern the same objects in the same natural world” [LW1:182]) and feature the same basic pattern. The only difference is in the “subject-

based biology, John Dupré and Daniel Nicholson propose that “the relation between science and metaphysics is dialectical. ... Scientific and metaphysical conclusions do not differ in kind, or in the sorts of arguments that can be given for them, but [only] in their degree of generality and abstraction.”¹²³

The mutual dependence of the metaphysical and metaphilosophical nature of the paradigm shift in the mind sciences can best be grasped by seeing that the shift is characterized by a turn to the *life-mind continuity thesis*. At present, research in the philosophy and sciences of mind is characterized by a wide range of nascent research programs that variously overlap, diverge, and potentially integrate a range of related fields and disciplines such as psychology,¹²⁴ biology,¹²⁵ neuroscience,¹²⁶ quantum physics,¹²⁷ phenomenology,¹²⁸ and the social sciences,¹²⁹ among others.¹³⁰ In recent years, scholars from a variety of disciplines have sought to create a more unified transdisciplinary discourse by conducting and communicating their research

matter,” the specific conceptual content of each discourse. Common-sense inquiries are concerned with ideas that can be immediately employed in the regulation of conduct in widely inclusive social communities. Scientific inquiries, conversely, are less concerned with immediate application of their concepts, especially because their concern is not with directly naming features of “objective” reality but rather identifying and describing the connections – via the observation of predictable, regular patterns of empirical events and conditions (LW1:6) – among empirical occurrences that are necessary for controlling and modifying those occurrences according to their predictable activity. The actual *application* of scientific concepts – “knowledge objects” – is an additional task, and Dewey even explains that this actual applying is “more truly science than what is conventionally called pure science” because it requires tangible interaction with the ineffable and aesthetic qualities of the existential, immediately-experienced world (LW1:128).

123. John Dupré and Daniel J. Nicholson, “A Manifesto for a Processual Philosophy of Biology,” in *Everything Flows: Toward a Processual Philosophy of Biology*, eds. Nicholson and Dupré (New York: Oxford, 2018), 4.

124. Doner, “Toward a New Psychology,” 1396-97.

125. Mark H. Bickhard, “The Biological Foundations of Cognitive Science,” *New Ideas in Psychology* 27 (2009): 75-84.

126. Tibor Solymosi and John R Shook, eds., *Neuroscience, Neurophilosophy and Pragmatism: Brains at Work with the World* (New York, NY: Palgrave Macmillan, 2014).

127. See, e.g., Gordon Globus (2009); Stapp (2009, 2011); and Theise and Kafatos (2016).

128. Mark Rowlands, *The New Science of the Mind: From Extended Mind to Embodied Phenomenology* (Cambridge, MA: The MIT Press, 2010).

129. Osmo Kivinen and Tero Piiroinen, “Sociologizing Metaphysics and Mind: A Pragmatist View on the Methodology of the Social Sciences,” *Human Studies* 30, no. 2 (2007): 97-114.

130. Neil D. Theise and Menas C. Kafatos, “Fundamental Awareness: A Framework for Integrating Science, Philosophy and Metaphysics,” *Communicative & Integrative Biology* 9, no. 3 (2016): e1155010 (1-19), <https://doi.org/10.1080/19420889.2016.1155010>.

according to the “four E” conception of mind: mind is *embodied, embedded, enactive, and extended*.¹³¹ As research in this area advances, however, additional ostensibly characteristic qualities of mind have been added to the mix. Mark Johnson notes three further “E’s” that he believes should be added to the list, thereby demonstrating the broad scope of the reconstruction of mind currently occurring: mind is *emotional, evolutionary and exaptative*.¹³² I propose that the *life-mind continuity thesis* can serve as a heuristic to conveniently and inclusively refer to this array of concepts while simultaneously indicating more accurately the central phenomenon explored by current research: namely, that mind is a naturalistic, emergent function of life as such rather than a mental-psychological faculty, substance, or power extraneously added to the supposedly non-cognitive biological-physiological functions characterizing living systems. The life-mind continuity thesis also more directly implies the connection to and necessity of a metaphysics of ontological continuity.

According to Evan Thompson, the life-mind continuity thesis states that “life and mind share a set of basic organizational properties, and the organizational properties distinctive of mind are an enriched version of those fundamental to life. Mind is life-like and life is mind-like.”¹³³ Andy Clark specifies that “the [continuity] thesis...would be true if, for example, the basic concepts needed to understand the organization of life turned out to be self-organization, collective dynamics, circular causal processes, autopoiesis, etc., and if *those very same concepts and constructs* turned out to be central to a proper scientific understanding of mind.”¹³⁴

131. Evan Thompson, “Looping Effects and the Cognitive Science of Mindfulness Meditation,” in *Meditation, Buddhism, and Science*, David L. McMahan and Erik Braun, eds. (New York: Oxford University Press, 2017), 56.

132. Mark Johnson, *Embodied Mind, Meaning, and Reason: How Our Bodies Give Rise to Understanding* (Chicago, IL: University of Chicago Press, 2017), 34.

133. Evan Thompson, *Mind in Life: Biology, Phenomenology, and the Sciences of Mind* (Cambridge, MA: Harvard University Press, 2007), 129.

134. Andy Clark, *Mindware: An Introduction to the Philosophy of Cognitive Science* (New York: Oxford University Press, 2001), 118. Emphasis original.

Peter Godfrey-Smith, in a discussion of Dewey's commitment to the life-mind continuity thesis,¹³⁵ explains that the thesis entails "constitutive or ontological principles, principles about what life and mind *are*. There is also a continuity principle which has a purely methodological character: Methodological Continuity. Understanding mind requires understanding the role it plays within entire living systems. Cognition should be investigated within a 'whole organism' context."¹³⁶ The close relationship between these ontological and methodological principles of continuity is crucial for properly understanding Dewey's theories of mind and inquiry. As Godfrey-Smith further explains,

Dewey is...one of the very few major philosophers in the recent English-speaking tradition to think that a theory of life is of general philosophical importance – to think that our theories of knowledge and inquiry, for example, should be linked to a general theory of living organization. For Dewey, making this link between inquiry and life was a way to overcome a 'dualistic' view of the relations between mind and nature. He established a picture of the relations between organism and environment in his theory of life, and was then able to make use of these relations in his theory of thought and inquiry. He sought to use his general position on organism/environment relations to avoid the artificial separations between mind and world which so often arise in epistemology.¹³⁷

The importance of the principle of continuity for Dewey's pragmatism can hardly be overstated. Indeed, Dewey scholars have consistently affirmed this: "The most important feature of Dewey's method and of his general position is to understand his 'principle of continuity;'"¹³⁸ "the

135. Godfrey-Smith and others make a distinction between "weak" and "strong" (or "deep," in Thompson's case) versions of the life-mind continuity thesis. As a substantial part of this distinction pertains to semantic nuances concerning the precise referents of "mind" and "cognition," I will not endeavor to parse this debate. Thoroughly addressing the many components of this debate – which vary across discipline and author – would add unnecessary, tangential detail to my study and distract from the key ideas relevant to my thesis.

136. Peter Godfrey-Smith, "Spencer and Dewey on Life and Mind," in *The Philosophy of Artificial Life*, ed. Margaret Boden (New York: Oxford University Press, 1996), 320. Emphasis original.

137. Godfrey-Smith, 324.

138. Thomas Alexander, "Dewey, Dualism, and Naturalism," in *A Companion to Pragmatism*, eds. John R. Shook and Joseph Margolis (Malden, MA: Blackwell, 2006), 189.

assumption of continuity is prevalent in Dewey's thought and critical to a proper understanding of his position;"¹³⁹ "[continuity is] undoubtedly the most fundamental principle in Dewey."¹⁴⁰

As Godfrey-Smith notes, the life-mind continuity thesis at the center of Dewey's naturalistic pragmatism entails principles of ontological continuity as well as methodological continuity. There is an ironic danger here, however, in keeping the ontological and methodological principles separate, as Godfrey-Smith seems to do in stating that there is a "purely methodological" character to the principle of continuity. This creates a division between ontology and methodology that seems to me quite ironically *discontinuous*. When Dewey discusses the notion of continuity, he never distinguishes between "types" of continuity, such as ontological, methodological, existential, or epistemological. Below and in chapter three, I will discuss in detail how Dewey's principle of continuity is intended to render continuous precisely these sorts of abstract distinctions. In short, I will argue that Dewey's use of continuity is expressly intended to indicate the ineradicable union of ontology and methodology in the operations of living systems. In other words, the life-mind continuity thesis asserts precisely that the "being" and "doing" of living systems are of a piece; it is "only upon reflective analysis," Dewey explains, that life is distinguished into abstractions such as "internal" and "external," "organism" and "environment," "knowing" and "doing," or "subjective" and "objective" (LW1:19). The whole idea of the life-mind continuity thesis is to capture the fact that life/experience as it immediately exists (as "an integration" [LW12:32]) admits of no such distinctions (LW1:6, 8-9, 30, 55, 111, 130, 186, 203, 209-10, 224, 264).

139. Raymond Boisvert, *Dewey's Metaphysics* (New York: Fordham University Press, 1988), 68-69.

140. Richard J. Bernstein, *John Dewey: On Experience, Nature, and Freedom* (New York: Liberal Arts, 1960), 180.

As a case in point, Dewey proclaims that “restoration of continuity is shown to do away with the mind-body problem” (LW1:8). Crucially, as noted above, Dewey does not claim to *solve* the mind-body problem; he simply dispenses with it by rejecting the metaphysical assumptions on which the problem supervenes. The metaphysical picture he rejects is the modern subjectivist paradigm that sets physical reality apart from mental reality, which is the basis for the existence of psychology as an independent field of study. In other words, the modern ontological dualism of physical and mental corresponds to the methodological-disciplinary dualism of physical sciences and psychological sciences: “psychology...reflects the old dualistic separation of mind from nature” (LW1:319). Dewey explains that the hypostatization of the “subjective” and “individual” as ontologically independent existences rather than “eventual functions” emergent from natural events (LW1:34, 64, 233) created the metaphysical and thereby methodological-disciplinary duality between physical and mental, and between physical sciences and psychological sciences:

But for lack of such [an empirical] method, because of isolation from empirical origin and instrumental use, the results of psychological inquiry were conceived to form a separate and isolated mental world in and of itself, self-sufficient and self-enclosed. Since the psychological movement necessarily coincided with that which set up physical objects as correspondingly complete and self-enclosed, there resulted that dualism of mind and matter, of a physical and a psychical world, which from the day of Descartes to the present dominates the formulation of philosophical problems. (LW1:23-24)

This mutually constitutive relation between ontology and methodology reflects the mutually constitutive relation between the metaphysical and metaphilosophical levels of the paradigm shift characterized by the life-mind continuity thesis. In other words, it is not possible to replace the modern, dualistic metaphysics of mind-matter, mental-physical with the principle of ontological continuity and leave intact the correlate modern disciplinary research framework

that separates the physical and psychological sciences. Dewey, with Arthur Bentley, states this explicitly:

Fortunately this scheme of divisions [which separates scientific inquiry into subject-matters of physical, biological, and psychological] is gradually losing its rigidities. ...the name "biology" assuredly covers everything that is psychological, unless perchance some "psyche" is involved that is "non-" or "ultra-" human. The word "psychological" itself is a hold-over from an earlier era, in which such a material series as "*the physical*," "*the vital*" and "*the psychic*" was still believed in and taken to offer three different realms of substance presented as raw material by Nature or by God for our perpetual puzzlement. If we are to establish knowings and knowns in a single system of Fact, we certainly must be free from addiction to a presumptive universe compounded out of three basically different kinds of materials. Better said, however, it is our present freedom from such material enthrallment, attained for us by the general advance of scientific research, that at long last has made us able to see all knowings and knowns, by hypothesis, as in one system. (LW16:63; emphasis original)

I suggest that the difficulty scholars have had with understanding and fully embracing Dewey's rejection of the mind-body problem and his radical reconstruction and integration of philosophy and science through his unified theory of inquiry – which are both based on the principle of continuity – is a result of two interrelated challenges that can now be met through an emerging transdisciplinary scholarly project (discussed below): the lack of vocabulary for speaking of mind when the mind-body, psychological-physical dualities are left behind, and the lack of a unified theoretical framework through which to develop the life-mind continuity thesis, which is an inherently transdisciplinary concept. As quoted above, Dewey asserts the need to "[see] mind-body as an integral whole" (LW3:27). The dilemma, however, is that the very language used to discuss the problem perpetuates the problem that Dewey claims is not a problem: "when we discuss the matter, when we talk of the relations of mind *and* body and endeavor to establish their unity in human conduct, we still speak of body *and* mind and thus unconsciously perpetuate the very division we are striving to deny" (LW3:27; emphasis original). Likewise, in *Experience and Nature*, he stresses that we do not even know how to talk about the unified activity of human

life¹⁴¹ traditionally discussed as activity separated into kinds or types, namely physical activity *or* mental activity¹⁴²:

Body-mind designates an affair with its own properties. A large part of the difficulty in its discussion – perhaps the whole of the difficulty in general apart from detailed questions – is due to vocabulary. Our language is so permeated with consequences of theories which have divided the body and mind from each other, making separate existential realms out of them, that we lack words to designate the actual existential fact. (LW1:217)

141. Dewey describes “the unity of mind and body in action” as a “unified wholeness of operation” (LW3:27-28). That is, human life *just is* this unified wholeness of operation; there is not physical activity, intellectual activity, emotional activity, and social activity. *All* human life activity is one kind of activity (emergent, functional, holistic transactivity) that, depending on how it functions in a given situation, manifests various degrees or ratios of *qualities* or *characteristics* such as “physical,” “mental,” “intellectual,” “emotional,” all of which are functional, consequential attributes of immediately unified experience.

142. A subtle but crucial difference between a modern, dualistic paradigm and a paradigm of ontological continuity is in the treatment of qualities named by the terms “physical” and “mental.” For dualists, something is *either* physical *or* mental in its constitution. One’s shin bone is a purely physical object, properly and exhaustively characterized by a set of physical properties and activities that occur upon a physical plane. To understand what a shin bone is, one does not need to identify and integrate “mental” phenomena such as emotions, intentionality, or desire; shin bones do not have emotions or desire. A “state of consciousness,” however, or an emotional experience, cannot be described or understood via the enumeration of physical properties (although, the general assumption of the search for the neural correlates of consciousness is that identifying the physical [biological-physiological] mechanism that produces the phenomenological experiences associated with mental states justifies an explanatory reductionism that regards as “epiphenomenal” non-material mental states and posits the physical mechanism as the real/true instantiation of mental phenomena [Horst 2007, 67-118; Campbell 2015, 232-292]). The “properties” of fear, for instance, are not described in terms of mathematical or chemical formulae the way that, e.g., the calcium of bones is described via enumeration of its physical-chemical molecular structure. Given this, “thought” as such is defined as a mental phenomenon, quality, or event. One’s shin does not think, but one’s mind does think. Conversely, Dewey’s theory of emergent mind, based on his principle of ontological continuity, regards *all* human activity as being qualified by both “physical” and “mental” characters (LW3:25-40). There is not mental activity and physical activity, which are separate kinds of activity and yet somehow relate or connect (the basis of the mind-body problem). There is just activity as such, existential-biological activity, and depending on how that activity *functions* in relation to the guidance of the creative process of the reconstruction of situations for the purposes of sustaining the functional integration of social situations as emergent – i.e. self-organized – living systems, the activity admits of different ratios of degrees of physical and mental *quality* (LW3:36). In other words, as functional qualities of natural events rather than “underlying and ultimate substances” (LW1:5), “physical” and “mental” are continuous, which is to say simultaneously operative and present in existential affairs. Dewey dedicates an entire chapter of *Experience and Nature* to describing this “complementary” (Kelso & Engstrom, 2006) nature of what abstract thought divides into dualities: precarious v. stable, fixed v. changing, contingent v. necessary, one v. many, actual v. possible, etc. (LW1:67, 186). The same is true for qualities of thought-action (again, for Dewey, “thought” *is* an action as literally tangible as searching for a lost coin or measuring physical objects [LW12:22; cf. LW1:61]); it simultaneously and “vitality” (LW1:47) integrates and manifests intuitive and analytic qualities: “...in actuality the difference between an ‘intuitive’ and an analytic person *is at most a matter of degree*, of relative emphasis” (LW1:227; emphasis added). In short, identifying empirical events through *either/or* descriptions is anathema to Dewey’s ontology of continuity. David Hildebrand (2003, 38) makes the same point. He explains that in Dewey’s pragmatic ontology, asking whether an event-existence is material *or* mental is a false choice. Instead, “mind and matter are natural, ontologically indiscrete existences that are distinguished by their unique function in experience rather than by metaphysical fiat.”

More recently, Scott Kelso echoes this sentiment, declaring that the primary challenge to properly formulating the mind-body problem is the lack of an adequate vocabulary and unified theoretical framework.¹⁴³

I believe, however, that it is now possible to overcome this absence of an adequate vocabulary couched within a theoretical framework capable of unifying the many specialized inquiries relevant to an elucidation of mind according to the life-mind continuity thesis. The emerging project of *process philosophy* can serve to provide, simultaneously, the vocabulary and integrating theoretical framework necessary for achieving Dewey's hope for "a genuine...integration of thought" (LW5:159). Dewey believed that "this unification will issue in its season" (LW5:160), and I believe that this season is upon us. In the following section, I discuss three key factors showing why process philosophy is the theoretical framework best suited to connecting Dewey with mindfulness: 1) process philosophy is simultaneously a metaphysical and metaphilosophical project; 2) process philosophy provides the vocabulary and theoretical and methodological frameworks needed to move mindfulness studies and interpretations of Dewey beyond the modern subjectivist view of mind [i.e. it advances the paradigm shift]; and 3) Dewey's pragmatism is best understood as an exemplar of the process philosophical approach.

Dewey as a Process Philosopher

Process philosophy refers to a contemporary, transdisciplinary scholarly project that works to integrate insights from a range of fields studying various phenomena entailed in the life-mind continuity thesis and related, process ontology-based hypotheses and research projects. In this section I discuss why Dewey is best understood when he is read as an exemplary process

143. Scott Kelso, *Dynamic Patterns: The Self-Organization of Brain and Behavior* (Cambridge, MA: The MIT Press, 1995), 29.

philosopher and how developing Dewey's theories of mind and inquiry through a process paradigm demonstrates the direct relevance of Dewey's pragmatism to the contemporary mindfulness movement.

The key to understanding Dewey's reconstruction of inquiry is to make explicit the process ontology at the core of his empirical naturalism and to understand the mutually constitutive connection between the metaphysical and metaphilosophical levels of his reconstruction of philosophy. Process philosophy as a unifying theoretical framework supports this task because it shares this dual nature as metaphysical and metaphilosophical project and it provides a transdisciplinary language for integrating insights from the many specialized inquiries (research disciplines and sub-disciplines) necessary for making sense of the life-mind continuity thesis.

As Godfrey-Smith explains above, Dewey thought that a theory of life was of fundamental importance for philosophy. His understanding of life according to the empirical results of biological science was his basis for his theory of emergent mind and unified theory of inquiry. Naturalizing philosophy by rendering continuous the functions of life and mind in this way requires an ontology of continuity in which the functions and nature of mind are taken to be intrinsic to the operations of living systems. This requires integrating concepts and empirical findings from the autopoietic theory of life, dynamic systems theory, process metaphysics, and the mind sciences.

Dewey's pragmatism, in fact, originated these fields' key ideas, even before they were named as such. But more than simply originating this line of thinking, I agree with those many contemporary scholars who regard pragmatism – especially Dewey's – as the philosophical project most aligned with and supportive of empirical study in the mind sciences. While Dewey

is well known for his work on education, democracy, aesthetic theory, dialogue/communications, and generally for his preeminent place in the American pragmatist tradition as the “philosopher of reconstruction,”¹⁴⁴ he is less known for his theories of mind, cognition, and somatic thought.¹⁴⁵ There are likely two broad reasons for this neglect and underdevelopment of Dewey’s philosophy of mind. First, Dewey’s thinking was generations ahead of his time, and the theoretical and conceptual claims he made about mind and cognition were truly radical and paradigm-shifting. During his time, however, the empirical evidence needed to support these conceptual revolutions was paltry,¹⁴⁶ so it is understandable that Dewey’s contemporaries were reluctant to embrace what likely seemed to them unfounded and wildly unorthodox ideas about mind, experience, and reality. Second, the pragmatic project initiated by C.S. Peirce, William James, and Dewey was quickly sidelined in academic circles as well as the popular intellectual culture by the rapid rise of the positivist movement.¹⁴⁷

Over the past few decades, however, pragmatism has been given a renewed look by the mainstream of academic philosophy as well as by scholars in fields such as the philosophy of science, psychology, cognitive science, and neuroscience. This transdisciplinary “pragmatic turn”¹⁴⁸ has spurred innovative work across a range of diverse disciplines and theoretical issues. Peter Godfrey-Smith, for example, proclaims that

Dewey's later thought [is] the high point of the pragmatist tradition so far. . . .naturalistic materialism and Dewey-style pragmatism are the two most important rival philosophical

144. William J. Gavin, ed., *In Dewey's Wake: Unfinished Work of Pragmatic Reconstruction* (Albany, NY: SUNY Press, 2003).

145. Svend Brinkmann, “Dewey’s Neglected Psychology: Rediscovering His Transactional Approach,” *Theory and Psychology* 21, no. 3 (2011): 298–317.

146. Mark Johnson, *Embodied Mind, Meaning, and Reason: How Our Bodies Give Rise to Understanding* (Chicago, IL: University of Chicago Press, 2017), 1-2.

147. Judith M. Green, “Introduction,” in *Richard J. Bernstein and the Pragmatist Turn in Contemporary Philosophy: Rekindling Pragmatism’s Fire*, ed. Judith M. Green (New York: Palgrave Macmillan, 2014), 2.

148. Green, 1-31.

outlooks which exist at present, as far as core metaphysical and epistemological questions about the relations between mind, knowledge and reality are concerned.¹⁴⁹

More recently, Jim Garrison revisits Richard Rorty's prophetic claim that "James and Dewey were not only waiting at the end of the dialectical road which analytic philosophy traveled, but are waiting at the end of the road which, for example, Foucault and Deleuze are currently traveling"¹⁵⁰ and shares his hope that "if it is [in fact] the end of the road for postmodernism, then pragmatism could come next."¹⁵¹

I contend that it is, indeed, time for pragmatism to "arrive,"¹⁵² and specifically for Dewey's theory of mind to be properly understood and more fully developed in conjunction with contemporary developments in the mind sciences. In the nearly 100 years since its publication in *Experience and Nature*, Dewey's pragmatic theory of life-mind has been increasingly affirmed, deepened, and extended based on empirical results from research in biology, evolutionary theory, neurophysiology, cognitive science, and neuroscience. As noted above and further discussed below, the contemporary turn in the mind sciences to a paradigm based on the life-mind continuity thesis (which incorporates the "seven-E" conception of mind discussed above) hinges on phenomena described by dynamic systems theory, the autopoietic theory of life, and process metaphysics. And, Dewey's pragmatism contains some of the earliest and most developed statements of these theoretical projects. As W. Teed Rockwell notes, Dewey "leapfrogged over both behaviorism and cognitive psychology, and articulated the basic principles of dynamic

149. Peter Godfrey-Smith, *Complexity and the Function of Mind in Nature* (New York: Cambridge University Press, 1996), 6-7.

150. Richard Rorty, *Consequences of Pragmatism* (Minneapolis, MN: University of Minnesota Press, 1982), xviii.

151. Jim Garrison, "If Pragmatism Ever Arrives," *Educational Philosophy and Theory* 50, no. 14 (2019): 1610.

152. Garrison, "If Pragmatism Ever Arrives," 1610.

systems theory.”¹⁵³ Likewise, scholars such as Mark Johnson,¹⁵⁴ Inna Semetsky,¹⁵⁵ and Phillip Reynolds¹⁵⁶ have shown how the autopoietic view of life-mind inheres in Dewey’s pragmatic naturalism.

It is not just that Dewey *prefigured* these fields, however; some scholars today argue that Dewey’s theory of mind is still to be preferred over many contemporary accounts of mind and cognition.¹⁵⁷ The emerging field of *neuropragmatism* represents such an attempt to show the unique strengths and insights of a pragmatic approach to the empirical data generated by the mind sciences.¹⁵⁸ As John Shook and Tibor Solymosi explain,

the amazing progress of the behavioral and brain sciences has confirmed many of pragmatism’s core claims.¹⁵⁹...Developmental psychology, experimental psychology, and cognitive science re-invigorated many pragmatist views of brain cognition, learning, and knowledge growth in the 1980s and 1990s. The first decades of the twenty-first century are accelerating this trend back to pragmatism. ...The broad tradition of pragmatism is needed now, more than ever.¹⁶⁰

In parallel fashion, Mark Johnson argues that Deweyan – and, to a lesser extent, Jamesian and Peircean – pragmatism is “the most appropriate nondualistic and scientifically responsible framework for understanding human experience and cognition.”¹⁶¹

153. Teed Rockwell, *Neither Brain nor Ghost: A Non-dualist Alternative to the Mind-Brain Identity Theory* (Cambridge, MA: MIT Press, 2005), 177.

154. Johnson, *Embodied Mind*, 74-81.

155. Inna Semetsky, “Re-reading Dewey through the Lens of Complexity Science, Or: On the Creative Logic of Education,” in *Complexity Theory and the Philosophy of Education*, ed. Mark Mason (Malden, MA: Wiley-Blackwell, 2008), 79-90.

156. Phillip McReynolds, “Autopoiesis and Transaction,” *Transactions of the Charles S. Peirce Society* 53, no. 2 (2017): 312-34.

157. E.g., Joshua Skorburg, “Beyond Embodiment: John Dewey and the Integrated Mind,” *The Pluralist* 8, no. 3 (2013): 66-78; Marco Stango, “A Deweyan Assessment of Three Major Tendencies in Philosophy of Consciousness,” *Transactions of the Charles S. Peirce Society* 53, no. 3 (2017): 466-90.

158. W. Teed Rockwell, “How Computational Neuroscience Revealed That the Pragmatists Were Right,” in *Neuroscience, Neurophilosophy and Pragmatism: Brains at Work with the World*, ed. Tibor Solymosi and John R. Shook (New York, NY: Palgrave Macmillan, 2014), 57-70.

159. John R. Shook and Tibor Solymosi, “Neuropragmatism and the Reconstruction of Scientific and Humanistic Worldviews,” in *Neuroscience, Neurophilosophy and Pragmatism: Brains at Work with the World*, eds. Tibor Solymosi and John R. Shook (New York: Palgrave, 2014), 4.

160. John R. Shook and Tibor Solymosi, “Introduction,” in *Pragmatist Neurophilosophy: American Philosophy and the Brain*, eds. John R. Shook and Tibor Solymosi (London: Bloomsbury Academic, 2014), 1.

161. Johnson, *Embodied Mind*, 17.

Dewey recognized this transdisciplinary nature of his biology-based, naturalistic pragmatism.¹⁶² He saw that naturalizing mind and inquiry requires reconstructing philosophy from a disciplinary specialist's discourse to an embodied practice of intelligent social change. In the aptly-named essay "Philosophy," Dewey explains his vision for a metaphilosophical reconstruction of philosophy into a social science as a "macroscopic...enterprise that accepts phenomena in gross; namely, the phenomena of social interactions...as the fullest manifestation of the nature of things accessible to the human mind" (LW5:176). Here, Dewey asserts that there is an "intellectual crisis [concerning] the initiation of new hypotheses regarding man, regarding the nature and significance of those human associations that form the various modes of social phenomena" (LW5:177). He argues for the reconstruction of philosophy from a specialized discourse concerned with the technicalities of philosophical systems to a social science concerned primarily with the "macroscopic...the gross and complex" phenomena manifest in and as social activity (LW5:174-77). In *The Quest for Certainty*, he emphasizes "the great transformation that is demanded in the older notions of mind and knowledge" (LW4:59) and explains that any specific phenomenon addressed by his work "cannot be attacked in isolation" (LW4:20) because notions about knowing and acting, "about the nature of the real world, about the nature of the mind and its organs of knowing, are completely bound up with one another, and their consequences ramify into practically all important ideas entertained upon any philosophic question" (LW4:19). Such questions, ultimately, are "too thoroughly entangled with fundamental beliefs and ideas in all sorts of fields" to be treated in isolation (LW4:20).

Process philosophy shares this goal of naturalizing and rendering continuous life and mind based on integrating insights from autopoiesis, dynamic systems theory, and process

162. Raymond Boisvert, "John Dewey's Reconstruction of Philosophy," *Educational Studies* 16, no. 4 (1985): 345.

metaphysics, and likewise asserts the consequent need for a metaphilosophical shift in philosophy and inquiry as such. Johanna Seibt explains that “there are...domains and topics of science that, as processists stress, *directly* imply a process-based metaphysics.”¹⁶³ Among others, these include quantum physics, self-organization, and embodied cognition. Seibt further discusses how integrating these empirical research projects with process metaphysics as a means of elucidating the basis of the life-mind continuity thesis requires a metaphilosophical change as well: process philosophy can be “broadly conceived as a research paradigm of philosophical inquiry.” While process philosophy “centers on ontology and metaphysics, [it] has full systematic scope.”¹⁶⁴ Given its special concern with developing a process-based metaphysics as an alternative to the substance-based metaphysics that has dominated Western philosophy throughout most of its history, process philosophy must adopt “a double role as metaphysical *and* metaphilosophical enterprise – pushing for a paradigm change, process philosophy has the double task of developing new explanatory concepts and providing arguments for why these concepts better serve the aims of philosophy.”¹⁶⁵

Process philosophy also serves the central challenge of mindfulness studies of integrating Eastern and Western systems of thought. Seibt explains that process philosophy is uniquely suited to this task, given that

The bias towards substance [metaphysics] seems to be rooted partly in the cognitive dispositions of speakers of Indo-European languages, and partly in theoretical habituation, as the traditional prioritization of static entities (substances, objects, states of affairs, static structures) at the beginning of Western metaphysics built on itself. In contrast, process philosophy shows fewer affinities to any particular language group and

163. Johanna Seibt, “Process Philosophy,” in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta, Winter 2018 (Metaphysics Research Lab, Stanford University, 2018), 30, <https://plato.stanford.edu/archives/win2018/entries/process-philosophy/>. Emphasis original.

164. Seibt, “Process Philosophy,” 2.

165. Seibt, 1-2. Emphasis original.

can allude to a rich tradition of reflection in many of the great schools of Eastern thought.¹⁶⁶

Indeed, Seibt argues that this confluence of Eastern and Western perspectives establishes one of the “three most pressing tasks of philosophy at the beginning of the 21st century,” and she suggests that process philosophy “can serve as a theoretical platform upon which to build an intercultural philosophy and to facilitate interdisciplinary research on global knowledge representation by means of an ontological framework that is no longer parochially Western.”¹⁶⁷

Dewey’s philosophy lends itself directly to this intercultural imperative as well. For instance, Ewing Y. Chinn has documented the resonance between Dewey’s pragmatic process metaphysics and the metaphysics of the Middle Way school of Buddhism, “the central philosophical movement” in the historical development of Buddhism.¹⁶⁸ In a similar vein, two leading Deweyan scholars – Jim Garrison and Larry Hickman – have recently published a dialogue with Daisaku Ikeda – founding president of the world’s largest lay Buddhist organization, Soka Gakkai International – in which they discuss the deep congruence between humanistic Buddhism and Deweyan pragmatism.¹⁶⁹ More than any other philosophy developed in the 20th century, therefore, Dewey’s pragmatism contains the theoretical, methodological, and practical resources for articulating and meeting the demands of the paradigm shift currently occurring in the study of mind and mindfulness.

Substance and Process Metaphysical Paradigms: Inquiry and What “Is”

166. Seibt, “Process Philosophy,” 4.

167. Seibt, 5.

168. Ewing Y. Chinn, “John Dewey and the Buddhist Philosophy of the Middle Way,” *Asian Philosophy* 16, no. 2 (2006): 87-98.

169. Jim Garrison, Larry Hickman, and Daisaku Ikeda, *Living as Learning: John Dewey in the 21st Century* (Cambridge, MA: Dialogue Path Press, 2014).

The Metaphysics of Mindful Inquiry: The Centrality of Ontology

The wholesale nature of Dewey's reconstruction of inquiry and everything relevant to inquiry (experience, mind, body, thought, emotion, affect, language, material/matter, causality, meaning, perception, communication, etc.) must be embraced if his approach to inquiry is to be engaged critically and if his position is to manifest theoretical and practical consistency and coherence.¹⁷⁰ Many Dewey scholars have acknowledged how radically and comprehensively he tried to re-define philosophy and inquiry generally. Douglas Browning reminds us that "Dewey's philosophy is such a radical departure from the tradition that we can understand him only by divesting ourselves of traditional pictures and by looking at things from a new slant."¹⁷¹ R. W. Sleeper also admonishes us to understand how fundamental a reconstruction of philosophy Dewey sought. He claims that his philosophy is "a contribution so substantial as to constitute a radical reconstruction of pragmatism as he found it"¹⁷² and that "in effect, what Dewey worked out was a reconstruction of both the Kantian and the Aristotelian deposits in the tradition. ...the result was no mere synthesis by a dialectic of compromise, but rather something far more radical, in that it penetrated to the roots of Kant's conception of reason and Aristotle's conception of nature."¹⁷³ Sleeper concludes that "the character of pragmatism as a philosophy is as little understood in our day as it was in Dewey's."¹⁷⁴ Dewey likewise indicates the wholesale nature of

170. Applying Dewey's approach in a wholesale, metaphilosophical manner establishes coherence within and with that approach because, as chapters three and four will detail, in Dewey's autopoietic process ontology, what anything "is" is a function of a system's organizational dynamics, which are by definition a feature of the system *as a whole*. Technically, separate from its organization, a field of transactivity/events *has no being* in an emergent process ontology (save proleptically). To merely cherry-pick isolated concepts and themes from Dewey's philosophy and apply them to specific, circumscribed aspects of education or philosophy as they currently exist is to mitigate against the wholesale, metaphilosophical paradigm shift that Dewey ultimately sought.

171. Douglas Browning, quoted in William T. Myers and Gregory F. Pappas, "Dewey's Metaphysics: A Response to Richard Gale," *Transactions of the Charles S. Peirce Society* 40, no. 4 (2004): 696.

172. Sleeper, *The Necessity of Pragmatism*, xxvi.

173. Sleeper, 7.

174. Sleeper, 8.

his reconstruction of philosophy when discussing his theory of emergent mind: “every word that we can use, organism, feeling, psycho-physical, sensation and sense, ‘emergence’ itself, is infected by the associations of old theories, whose import is opposite to that here stated” (LW1:207).

Understanding Dewey’s wholesale reconstruction of inquiry is necessary for making sense of his strategy for addressing both long-standing issues in philosophy and contemporaneous trends in educational philosophy and practice. In short, Dewey sought to *dissolve* problems as he found them rather than solving them in their presenting form. Dewey explains in various places throughout his later works that the mind-body, mind-world, and related problems do not need to be *solved* but *dissolved* by showing the dubiousness of the underlying metaphysical assumptions. In *Experience and Nature*, for instance, he explains that

Efforts to answer [the question of the relation of experience (defined as aesthetic, qualitative, subjective) and nature (defined as physical, material, objective)] constitute a large part of the technical content of modern metaphysical thought. Given the premises, its import covers almost every thing from the problem of freedom, ideals and ideas to the relation of the physical and the mental. With respect to the latter, there is the causal problem of their existential relation; and there is the cognitive problem of how one order of existence can refer to the other in such a way as to know it. We are not concerned here with the voluminous literature and various (controversial and controverted) points of view that have emerged. *It is pertinent, however, to recall the source of the problems; and to register the statement that without the underlying dubious assumption, we are not called upon to find solutions; they cease to be perplexities as soon as certain premises are surrendered.* (LW1:110; emphasis added)¹⁷⁵

The lacuna preventing scholars from fully appreciating Dewey’s method and embracing his alternative is a lack of appreciation for the central role of metaphysics or ontology in his pragmatic reconstruction of philosophy. Dewey’s metaphysics of ontological continuity and

175. Rupert Read takes the same approach in his survey and critique of the wide-ranging “solutions” to the mind-body problem and problems of consciousness. He says that when we reject the modern, dualistic paradigm from which these problems grew, “*the mind-body problem as a felt problem really can evaporate completely away.*” Rupert Read, “The ‘Hard’ Problem of Consciousness,” *Theory, Culture & Society* 25, no. 2 (March 2008): 51–86. Emphasis original.

emergence is his strategy for dissolving the modern subjectivist theory of mind-body dualism as well as the basis for his alternative theory of emergent mind and inquiry. As mentioned above, Dewey argues that the “conceptions in virtue of which the [mind-body] problem exists...have primarily nothing to do with mind-body; they have to do with underlying metaphysical issues” (LW1:168). Rejecting a metaphysics that separates mind from body, mind from world, mental from physical, and experience and nature, Dewey proposes an ontology of naturalistic continuity of life-mind as the alternative: “restoration of continuity is shown to do away with the mind-body problem” (LW1:8). David Hildebrand affirms this, noting that “Dewey’s rejection of the central tenets of traditional epistemology was also a rejection of the metaphysical picture on which those tenets were based.”¹⁷⁶ He further explains that “the reconstruction of experience is a project both metaphysical and epistemological; it results in a portrait of reality that no longer erects substantive ontological distinctions between mind and world. Thus, the external world problem is dissolved.”¹⁷⁷

Dewey himself asserts the need for a radically new type of philosophy based on rendering continuous life and mind. He claims that “the question of the integration of mind-body in action is the most practical of all questions we can ask of our civilization. It is not just a speculative question; it is a demand” (LW3:29-30). And in the essay “What I Believe: Living Philosophies – VII,” Dewey says that “the chief intellectual characteristic of the present age is its despair of any constructive philosophy – not just in its technical meaning, but in the sense of any integrated outlook and attitude” (LW5:276-77). What is needed, he admonishes, is a “new, coherent view of nature and man,” which requires “a radically different type of philosophy” (LW5:277).

176. David Hildebrand, *Beyond Realism and Anti-Realism: John Dewey and the Neopragmatists* (Nashville, TN: Vanderbilt University Press, 2003), 30.

177. Hildebrand, 47.

The Origins of the Substance Metaphysical Paradigm: Parmenides' Reification of Being

In this section I endeavor to show how and why ontological considerations are fundamentally important for the question of inquiry, including Dewey's revolutionary account of inquiry based on the life-mind continuity thesis. The inextricable connection of ontology to inquiry is made clear by an examination of the origins of metaphysical thought in the Western tradition.

Andrew Winters explains that for ontology defined as "the study of being or what fundamentally exists," the Western tradition has developed two basic postulates: substances or processes.¹⁷⁸ He further notes that the substance metaphysical paradigm initiated in the pre-Socratic era and formalized by Aristotle is – *à la* Thomas Kuhn – the "received view in much of contemporary Western analytic metaphysics."¹⁷⁹ The pre-Socratics that Winters mentions primarily refers to the debate about *change* and *being*, exemplified by the contrasting positions of Parmenides and Heraclitus. In short, Parmenides argued that change is impossible and therefore what is Real (Being "as such") is unchanging, whereas Heraclitus argued that what can be said to exist – i.e., being *qua* being – *are processes of continual change*.

The standard rendering of Parmenides' argument against the possibility of change goes as follows. If an object-entity-substance A is to change into B, A would first have to cease to exist, resulting in nothingness, and then B would have to come into existence out of that nothingness. But nothingness cannot exist, therefore change cannot occur.¹⁸⁰ While there is an ostensible intuitive plausibility to this, the matter is much more complex. Specifically, the larger context

178. Andrew M. Winters, *Natural Processes: Understanding Metaphysics Without Substance* (Switzerland: Palgrave Macmillan, 2017), x; 1.

179. Winters, ix.

180. Mark H. Bickhard, "Emergence: Process Organization, not Particle Configuration," *Cybernetics and Human Knowing* 15, nos. 3-4 (2008), 57.

and origins of this argument are neglected. Richard Campbell explains that Parmenides' argument is not merely that change cannot occur, but more importantly that the Real must be unchanging. Parmenides developed his argument about change and the fundamental ontological nature of reality through a philosophical poem concerning the proper path of inquiry, for which there are two basic options: the path of *is* or the path of *is not*.

In Parmenides' poem, a young philosopher initiate is taken to the gates of Night and Day, which are guarded by the Goddess of Justice who serves to adjudicate the case of determining the proper path of inquiry. The determination of the matter roots in the distinction between *is* and *is not*:

The decision concerning these things depends on this:
 "is" or "is not". But it is decided, as is necessary,
 to leave the one indiscernible and unnameable (for no true
 path is it), the other to be and to be veridical.¹⁸¹

The Goddess explains that inquiry must, by necessity, follow the path of *is*, for the path of *is not* is literally indiscernible:

Come now, I shall tell you, and you convey the story you have heard,
 what paths of inquiry alone there are for discerning (*noēsai*):
 the one, in terms of "is" and "is not not to be" [i.e., "necessarily is"]¹⁸²
 is the course of Persuasion, for she attends upon truth;
 the other in terms of "is not" and "is needful not to be",
 that I point out to you as being an altogether indiscernible track;
 for you could neither come to know the unreal, for that is not feasible,
 nor could you point it out.¹⁸³

Campbell explains that there are a handful of debates about various interpretive issues attending this and related passages of Parmenides' poem.¹⁸⁴ These include questions of translation, transliteration, grammar, syntax, regional dialects, and conceptual intention. For my purposes, it

181. Parmenides (Fragment 8.15-18), as quoted by Campbell, *The Metaphysics of Emergence*, 11.

182. Bracketed insertion added by Campbell.

183. Parmenides (Fragment 2), as quoted by Campbell, *The Metaphysics of Emergence*, 11-12.

184. Campbell, *The Metaphysics of Emergence*, 12-13.

is not necessary to detail or engage these debates. The relevant upshot concerns the *effect of* Parmenides' argument on the basic premises of the substance metaphysical paradigm. Campbell explains that Parmenides' thought introduced into metaphysics two "fateful themes" which have exercised a profound influence on philosophy and science ever since:

The way Parmenides presents this flawed argument nevertheless introduced into Western thought the first of his fateful themes. The goddess' revelation quoted above ends with the words "you could neither come to know the Unreal, for it cannot be consummated, nor could you point it out." 'The Unreal' here (*to mē on*) is thereafter contrasted with 'the Real' (*to eon* in his dialect), an expression formed by attaching the definite article to the present participle of the Greek verb "*einai*" (to be), thereby creating a noun-phrase. This grammatical transformation made it seem natural (although not necessary) to interpret that noun-phrase as referring to some entity – a reification of being – as if being is an entity whose features could be described in the ensuing argument. This way of talking was then adopted, without question, by both Plato and Aristotle (as *to on* in their Attic dialect), although embedded in much more sophisticated systems of thought. Given the respect rightly accorded to their philosophies, it is not surprising that the dominant tradition in Western metaphysics has perpetuated the assumption that entities manifest the primary way of being. When Parmenides applies his argument about "is not" to the Real, it leads to the second fateful theme: that the Real is unchanging... it must either simply *be* – completely – or not at all, and the latter alternative is impossible.¹⁸⁵

In short, Parmenides' "reification of being" resulted in the basic metaphysical premise – at the core of the substance metaphysical paradigm – that *what is* are primarily entities conceptualized as "particular thing[s]"¹⁸⁶ or "discrete countable substances."¹⁸⁷ Inquiry, therefore, is concerned with investigating the antecedently-existing, ontologically-independent entities, objects, or substances that constitute reality, and inquiry succeeds when these entities are accurately named and described in conceptual-symbolic language. As I will discuss below, Dewey presents a fundamentally and comprehensively different account of the ontological nature of reality and the derivative nature of inquiry. First, a brief comment on Heraclitus' alternative account is in order.

185. Campbell, *The Metaphysics of Emergence*, 13-14.

186. Campbell, 10.

187. Winters, *Natural Processes*, 17.

Heraclitus of Ephesus (535-475 BC), an older contemporary of Parmenides, is standardly interpreted as arguing that all reality is flux, that everything is constantly changing – and therefore, as the popular saying goes, that one cannot step twice into the same river. The logic here seems intuitively plausible: each time you step into a river, the water your foot touches is different water because of the continuous flow of the river. Therefore, because the water at a given location is different each moment, each time you touch that point of the river you touch a “different river.”

There is a subtle interpretive error attending Heraclitus’ position, however. As Campbell notes, “there are strong grounds for thinking that Plato has seriously misreported Heraclitus’ position.”¹⁸⁸ Typically, Heraclitus is taken to mean that because everything is constantly in flux, the identity of existents likewise constantly changes. More accurately, though, Heraclitus argued that it is precisely *by changing* that identity *is maintained*.¹⁸⁹ In other words, there are not first (entity- or object-like) *things* that *change into* other things; there are only processes of change, and this is the “identity” of natural events as such – processes of change. Thus, a more accurate interpretation of Heraclitus would yield the dictum that *it is precisely because the river flows (and thus the water at any given point is constantly changing) that we do step into the same river each time we step into it*. The river is the same river *because it “changes”* (i.e., flows¹⁹⁰). That is, the river is defined *as a flowing change*, and thus *in its changing it maintains its identity as a process of continuous (temporally-extended, i.e. diachronic) change*.

188. Campbell (2015, 11) here cites Kahn (1979) and Graham (2002, 2008) as sources discussing this matter.

189. Campbell, *The Metaphysics of Emergence*, 10-11.

190. This is the process ontological meaning underpinning the recent developments in *processural biology*, as characterized by the book *Everything Flows*, edited by Daniel J. Nicholson and John Dupré. That is, it is not just select and obvious aspects of the natural world that flow – like rivers, waterfalls, and air – but *all* existents in the natural world are properly regarded as *flowings* just as much as rivers are defined as a flowing of water. Daniel J. Nicholson and John Dupré, eds., *Everything Flows: Toward a Processural Philosophy of Biology* (New York, NY: Oxford University Press, 2018).

This ontological perspective presents a fundamentally different definition of “change” and identity. Rather than change being defined through the dualistic, absolutistic *is~is not* framework (which is derived from the grammatical structure of Greek, as Campbell discusses, and not actually based on consistent, detailed empirical evidence), change and identity are of a piece. Thus, the question of whether A can “change into” B is irrelevant and nonsensical to a process ontology. This is because what we define, abstractly – i.e., symbolically-linguistically – as “A” is a certain patterned process of change. The ongoing, continual maintenance of that type of process of change is A. This yields the insight Heraclitus was trying to convey: it is by continually changing that A’s identity as A – as a process of change – is maintained. This, as I will discuss in chapter three, is the ontological basis of the autopoietic theory of life.

Campbell summarizes that even though many philosophers after Parmenides rejected his absolute denial of the possibility of change, his basic ontological assumptions persisted in exercising significant influence on the systems of nearly all subsequent metaphysicians:

[Parmenides’] denial of the reality of change was too extreme for most of the subsequent philosophers to accept, at least not so sweeping and incredible an assertion. But...it introduced into Western thought two powerful themes: a) the reification of being and b) what is unchanging is the default condition, such that change is always problematic, requiring explanation. With one notable exception (Heraclitus), in ancient times the radical alternative – that for worldly phenomena, their being inevitably involves processes over time – was never seriously considered. After all, processes are temporally extended, and necessarily entail changes, which take time.¹⁹¹

Mark Bickhard concurs, discussing how various solutions to Parmenides’ argument against the possibility of change have been developed in his wake. These include Empedocles’ four fundamental substances: earth, air, fire, and water; Democritus’ individual atoms; and Aristotle’s elaboration of Empedocles’ four elemental account.¹⁹² Despite Aristotle’s account being

191. Campbell, *The Metaphysics of Emergence*, 14.

192. Bickhard, “Emergence,” 57-58.

significantly more sophisticated, nuanced, complex and allowing for change, Bickhard suggests that “there was still a Parmenidean-satisfying base of unchanging prime matter [in Aristotle’s account]. This is the heritage from which the Western tradition of substance and particle derives.”¹⁹³

Bickhard further explains that three possible ontological frameworks can be built from the assumption of the fundamentality of discrete substances or particles. There is the dualistic option, positing two distinct realms of existence, namely the Real and Ideal or physical and mental. Exemplary of this option are Aristotle’s substance and form, Descartes’ two kinds of substances (mental and physical, or mind and matter¹⁹⁴), Kant’s two realms, and “analytic philosophy’s realm of scientific fact set off from that of linguistic normativity and modality.”¹⁹⁵ The second option is some form of *idealism*, and the third option is a materialistic *realism*, which posits that there is nothing but the “physicalistic realm, as with Hobbes, Hume (on most interpretations), Quine, and most of contemporary philosophy and science.”¹⁹⁶

Dewey acknowledged this same basic situation. In a description of the fundamental difference between the *a priori* method in philosophy (what he calls “non-empirical method,” which is what Parmenides employed in his reification of Being) and the empirical method at the core of his naturalistic pragmatism, Dewey writes that non-empirical method begins with the assumption that “object and subject, mind and matter (or whatever words and ideas are used¹⁹⁷)

193. Bickhard, “Emergence,” 58.

194. Boisvert, “Dewey’s Reconstruction of Philosophy,” 345.

195. Bickhard, 58.

196. Bickhard, 58.

197. Though Dewey, of course, discusses a wide range of specific dualities – mind-body, mental-physical, real-ideal, internal-external, experience-nature, subjective-objective, individual-social, etc. – he is ultimately concerned with duality *as such*. The original, historical antecedent of duality in Western philosophy is Parmenides’ philosophical poem as described in the text above, which framed the entire question of inquiry *qua* inquiry through the dualistic *is v. is not* paradigm. It is this entire dualistic framework – inclusive of all specific dualities such as named above – that Dewey rejects outright. This is the core of Dewey’s assertion that “the source of...problems” such as the relation between the physical and mental is a matter of “underlying dubious [metaphysical]

are separate and independent” (LW1:19). The various issues attendant the “mind-body problem” result: “how it is possible to know at all; how an outer world can affect an inner mind; how the acts of mind can reach out and lay hold of objects defined in antithesis to them” (LW1:19-20). Dewey then discusses the characteristic ontological responses to this situation, which include materialistic realism, psychological idealism, or some form of physical-mental dualism (LW1:23-24):

One thinker turns metaphysical materialist and denies reality to the mental; another turns psychological idealist, and holds that matter and force are merely disguised psychical events. Solutions are given up as a hopeless task, or else different schools pile one intellectual complication on another only to arrive by a long and tortuous course at that which naïve experience already has in its own possession. (LW1:20)

Dewey and Bickhard likewise agree that this metaphysical paradigm ultimately sets for philosophy a set of intractable debates that have characterized much of philosophical and scientific discussion throughout the history of the Western tradition. As Bickhard puts it, the assumption that reality is constituted by some form of basic particulars “generates insurmountable conceptual problems in attempting to understand the world.”¹⁹⁸ Dewey expresses this in various ways throughout his later works. For instance, in the *Logic* he explains that “the metaphysical problem of the One and the Many has at various times had a very considerable influence upon logical theory...The *insoluble problems* which have led to speculative metaphysical constructions about the One and the Many arise from making entities, expressed in nouns, out of processes and operations properly designated by active verbs and adverbs” (LW12:198-99; emphasis added). In *Experience and Nature*, he discusses at length how countless “solutions” to the mind-body problem – premised on a metaphysical duality that posits

assumption[s].” When the dubiousness of these assumptions is laid bare, “we are not called upon to find solutions; they cease to be perplexities as soon as certain premises are surrendered” (LW1:110).

198. Bickhard, “Emergence,” 62.

a physical realm or substance separate from a mental realm or substance – have all failed, not because they are not good enough solutions but because the “underlying dubious [metaphysical] assumption[s]” (LW1:110) have created an equally dubious “problem” of mind-body, mind-world relations: “the formalism and *unreality* of the [mind-body] problem remains, however, in the theories which have been offered as its ‘solutions’” (LW1:194; emphasis added).

Dewey and Bickhard are in further agreement that the basic premises of the substance metaphysical tradition are of primary importance for questions of mind and the mind-body problem. As Dewey says, “I do not know of anything so disastrously affected by the tradition of separation and isolation as is this particular theme of body-mind” (LW3:27). As Bickhard summarizes:

This aporetic nest of issues has its strongest contemporary focus with respect to mind and mental phenomena: are they part of the natural world, or do they involve some sort of special non-natural realm or substance or property? They cannot be understood as part of the natural world so long as that world is understood to be constituted in substance or particles. That is the metaphysical framework that generates the split in the first place. But shifting to a process metaphysical framework is not only conceptually and scientifically advisable, it also dissolves all three of the basic sources of that split.¹⁹⁹

Shifting to a process metaphysical framework as the most effective means of resolving (or *dissolving*, as discussed earlier in this chapter) the mind-body problem was precisely Dewey’s strategy. Dewey explicitly claims that the mind-body problem has “primarily nothing to do with mind-body; they have to do with underlying metaphysical issues:—the denial of quality in general to natural events; the ignoring in particular of temporal quality and the dogma of the superior reality of ‘causes’” (LW1:194). As I discuss in detail below, Dewey is here denoting the key, fundamental differences between a substance metaphysical and process ontological

199. Bickhard, “Emergence,” 62.

paradigm. And it is on the basis of his process pragmatic account of reality that Dewey constructs his “‘emergent’ theory of mind” and inquiry (LW1:207).

The general and fundamental difference between the substance metaphysical paradigm and Dewey’s process pragmatism can now be stated. Where the substance paradigm regards the basic ontological question of “What is?” as answerable by synchronically *naming* or *describing* the antecedently-existing particles, entities, or objects that constitute reality,²⁰⁰ Dewey says this is impossible and redefines the very notion of “is” and derivative concepts such as identity, change, naming, describing, and knowledge. For Dewey, *what is* cannot, in principle, be named, described, or linguistically represented; but it *can* be (immediately, qualitatively) *experienced* or *had* (LW1:28). Dewey asserts that

Immediacy of existence is ineffable, but there is nothing mystical about such ineffability; it expresses the fact that of direct existence it is futile to say anything to one's self and impossible to say anything to another. Discourse can but intimate connections which if followed out may lead one to have an existence. Things in their immediacy are unknown and unknowable... Immediate things may be *pointed to* by words, but not described or defined. (LW1:74-75; emphasis original)

As I will discuss below, for Dewey reality “as such” – that is, the nature of the Real – should not be understood as a collection of discrete entities but as an ineffable, qualitative whole. That is, reality as such *is qualitiveness*. This is the most that can be directly said “about” it.²⁰¹

200. Indeed, this is the import of Parmenides’ poem about the path of inquiry. The proper path of inquiry is to seek what “is” as antecedently existing reals that can be named as such, because what “is not” literally does not exist and therefore cannot be named. Thus, inquiry seeks to name and describe an objective reality set apart from an observing mind. Dewey emphatically rejects both this ontology and the derivative understanding of inquiry.

201. In this statement is contained an example of one of the primary obstacles to understanding Dewey’s position. The very notion that symbolic language (i.e. this dissertation, or vocalized words) is a “speaking about” something “external” to or separate from the speaking is anathema to Dewey’s account of language, for it assumes and implies a duality that Dewey rejects. The duality is that there is a *something* (“thing” here defined as an antecedently existing entity, substance, or particle, per the substance metaphysical paradigm) and then, separate from that thing, a linguistic-symbolic representation *of* that thing. This is emphatically not Dewey’s understanding of language. (See, e.g., LW1:132-160.) Thus, it is technically improper to say that we can say *anything* “about” reality, where reality is defined as that antecedently-existing, external state of affairs existing temporally prior to and ontologically independent of our linguistic-symbolic “representations of” it. In other words, this is not how Dewey defines the event-activity of “saying.”

In his article “Qualitative Thought,” Dewey explains what this means for the copula *is* in ostensibly ontologically predicative statements such as “that thing is sweet.” In contrast to the “common Greek view that the predicative use of ‘is’ is simply to join names [and where] any simple ‘is’ sentence (i.e., one without negation) is saying that something identified by a subject-term belongs together with the characteristic picked out by the predicate-term,”²⁰² Dewey understands “is” as indicating a *functional* operation or event that is expected or hoped to occur in future experience:

When...it is recognized that predication—any proposition having subject-predicate form—marks an attempt to make a qualitative whole which is directly and non-reflectively experienced into an object of thought for the sake of its own development, the case stands otherwise. What is ‘given’ is not an object by itself nor a term having a meaning of its own. The ‘given,’ that is to say the existent, is precisely an undetermined and dominant complex quality. ‘Subject’ and ‘predicate’ are correlative determinations of this quality. The ‘copula’ stands for the fact that one term is predicated of the other, and is thus a sign of the development of the qualitative whole by means of their distinction. It is, so to speak, the assertion of the fact that the distinctions designated in subject and predicate are correlative and work together in a common function of determination.

A certain quality is experienced. When it is inquired into or thought (judged), it differentiates into ‘that thing’ on the one hand, and ‘sweet’ on the other. Both ‘that thing’ and ‘sweet’ are analytic of the quality, but are additive, synthetic, ampliative, with respect to each other. The copula ‘is’ marks just the effect of this distinction upon the correlative terms. They mark something like a division of labor, and the copula marks the function or work done by the structures that exhibit the division of labor. To say that ‘that thing is sweet’ means ‘that thing’ will *sweeten* some other object, say coffee, or a batter of milk and eggs. The intent of sweetening something formed the ground for converting a dumb quality into an articulate object of thought. (LW5:253; emphasis original)

This qualitative process ontology has profound implications for how inquiry is defined and engaged. In contrast to the modern subjectivist paradigm that understands thought and inquiry as mental processes occurring within the individual minds of subjects as ontologically-independent, antecedent existences, Dewey’s theory of inquiry defines inquiry as an emergent

202. Campbell, *The Metaphysics of Emergence*, 12.

function of naturalistic events: “Thought and reason are not specific powers... A naturalistic metaphysics is bound to consider reflection as itself a natural event occurring within nature because of traits of the latter” (LW1:61-62). More specifically, as the remainder of this study will show, human inquiry is a transactive function of social organizations as qualitatively unified, autopoietic wholes. This means that the goal of inquiry is not to “get the right answer” (where this refers to an epistemological-conceptual term already known in advance of an inquiry, such as characterizes much content and process in modern schooling) but to tangibly reconstruct an existential situation from an indeterminate to a determinate quality. Given that such qualities are ineffable, inquiry begins, is guided by, and ends with an aconceptual somatic experience of the pervasive, unifying quality that constitutes a situation *as* a situation.

The following section will detail the process ontology at the core of Dewey’s pragmatism. This will provide the basis for chapter three, in which I discuss the autopoietic theory of life, which forms the basis of the life-mind continuity thesis and Dewey’s theory of emergent mind and inquiry. Then, chapter four will build on this foundation to discuss Dewey’s notions of inquiry, mind, and subjective mind.

Dewey as Process Philosopher

As mentioned in the introduction, the nature and importance of metaphysics for Dewey’s pragmatism has typically been misunderstood or simply neglected. Scholars such as Charlene Haddock Seigfried²⁰³ and Richard Rorty²⁰⁴ have sought to simply eradicate metaphysics from Dewey’s pragmatism (and pragmatic philosophy generally), but scholars such as William T.

203. Charlene Haddock Seigfried, “Ghosts Walking Underground: Dewey’s Vanishing Metaphysics,” *Transactions of the Charles S. Peirce Society* 40, no. 1 (2004): 53-81.

204. Richard Rorty, “Dewey’s Metaphysics,” in *New Studies in the Philosophy of John Dewey*, ed. Steven M. Cahn (Hanover, NH: University Press of New England, 1977), 45-74.

Myers argue that this is unnecessary and that metaphysics has a place in pragmatic thought.²⁰⁵ Indeed, a wide range of scholars have treated the metaphysical component of Dewey's pragmatism, including R.W. Sleeper (1960, 1992, 2001), John Stuhr (1980, 1982, 1989, 1992) Thomas Alexander (1987, 1992, 2002, 2003, 2013), Randy Friedman (2011), John Shook (2000), Jim Garrison (1990, 1999, 2005, 2006, 2009), David Hildebrand (2003), Raymond Boisvert (1988, 1998, 2003), William Myers (2004), Thomas Gardner (2000), Mark Johnson (1992, 2007, 2014, 2017), James Gouinlock (1972), Teed Rockwell (2005), Richard Bernstein (1961), Judith Green (2008), and Sholom J. Kahn (1948).

Despite this rich collection of literature, no scholar has yet explicitly discussed Dewey's metaphysics as of the *processural* variety. Philosophers working in the process paradigm have named this as worthy of attention, however. Johanna Seibt notes that "William James and John Dewey developed a process-based pragmatist metaphysics"²⁰⁶ and Nicholas Rescher asserts that Dewey "was a dedicated process philosopher"²⁰⁷ for whom "there is a close relationship between processism and pragmatism."²⁰⁸

Among Dewey scholars, Raymond Boisvert has come the closest to explicitly identifying Dewey's metaphysics as process-based. Boisvert explains that "according to Dewey, there are 'two typical ways of regarding nature.' One, the Cartesian, views it as 'something essentially rigid and static.' The other, that taken by Leibniz, describes it as 'something essentially dynamic and active. Change according to law is its very essence'."²⁰⁹ Boisvert further notes that "among

205. William T. Myers, "Pragmatist Metaphysics: A Defense," *Transactions of the Charles S. Peirce Society* 40, no. 1 (2004): 39-52.

206. Seibt, "Process Philosophy," 13.

207. Nicholas Rescher, *Process Metaphysics: An Introduction to Process Philosophy* (Albany, NY: SUNY Press, 1996), 4.

208. Rescher, 20.

209. Here Boisvert is quoting Dewey (EW1:279); Raymond Boisvert, *Dewey's Metaphysics* (New York: Fordham University press, 1988), 34.

the many terms Dewey uses to express the active dimension of existence, ‘change,’ ‘process,’ ‘activity,’ ‘motion,’ and ‘movement’ are the most prominent.”²¹⁰

In his second book, *Leibniz’s New Essays Concerning Human Understanding*, Dewey states that Leibniz was “the greatest intellectual genius since Aristotle” (EW1:267). Leibniz’s “great glory as a philosopher,” Dewey later explains, was his view of “the universe as a unity of inter-related members – as an organic unity, not a mere self-identical oneness...a unity of activity, a dynamic process” (EW1:415). It is significant that from the beginning of Dewey’s career (*Leibniz’s New Essays* was published in 1888), he was concerned to build a philosophy according to a dynamic, processual ontology of nature as an “organic unity.” While the nuances of his thinking certainly developed over time such that his most refined ideas are presented in his later works, the key ontological postulate of his pragmatism was operative from the start: reality is a unity of dynamic, continuously-interactive processes.

In my discussion of Dewey’s metaphysics, I will use the term *ontology* rather than *metaphysics*. The term “metaphysics” can be misleading insofar as it evokes the traditional *a priori*, system-building approach to metaphysics. The “meta” in the term can also be misleading, implying something over and above, or transcending, empirical-physical reality.²¹¹ Dewey emphatically did not understand metaphysics in this sense, and late in his career he lamented ever using the term because it caused his view to be routinely misunderstood because conflated

210. Boisvert, 35.

211. As Peter van Inwagen and Meghan Sullivan recount, the term *metaphysics* was likely first introduced by a posthumous editor of Aristotle’s works who sought a classificatory means of indicating that the 14 books collectively titled *Metaphysics* are to be logically studied and categorized after the books that comprise the *Physics*. Aristotle himself did not use or even know the term *metaphysics*. Far from implying any substantive ontological or philosophical meaning, then, the term was originally intended to serve only as a bibliographic categorization. Peter van Inwagen and Meghan Sullivan, “Metaphysics,” in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta, Spring 2020 (Metaphysics Research Lab, Stanford University, 2020), <https://plato.stanford.edu/archives/spr2020/entries/metaphysics/>.

with or compared to the traditional mode of metaphysics he was trying to leave behind.²¹² What must be stressed is that this does not mean that Dewey had no concern for what “metaphysics” is all about, and he unequivocally explains his interest in ontology in a letter to Arthur Bentley: “while I think the *words* [metaphysics and metaphysical] were most unfortunate, I still believe that which they were used to name is genuine and important” (LW16:388; emphasis original).

I will follow Boisvert in using the term *ontology* in the discussion of this element of Dewey’s thought. Boisvert says that ontology is the “etymologically more suitable word for the discipline known, prior to the eighteenth century, as ‘metaphysics.’”²¹³ Ontology is the “study of being *qua* being...[and] Dewey uses ‘ontology’ and ‘metaphysics’ interchangeably.”²¹⁴ This usage, it is hoped, will avoid undue associations with systems and approaches to metaphysics that Dewey wanted to leave behind while emphasizing that it is the general and inclusive sense of “being qua being” that Dewey’s ontology substantively addresses.

Dewey’s Process Ontology: Qualitative Continuity and the Inclusive Integrity of Experience

The first of the three key metaphysical issues underlying the mind-body problem, according to Dewey, is the “denial of quality in general to natural events.” This notion of the qualitiveness of nature is inextricably linked to the central concept in Dewey’s process ontological pragmatism: *continuity*. Properly understanding and experientially engaging the qualitative continuity of nature is Dewey’s strategy for overcoming the mind-body problem: “Restoration of continuity is shown to do away with the mind-body problem” (LW1:8). Deweyan scholars consistently stress the importance of continuity for understanding his pragmatism: “The most important feature of Dewey’s method and of his general position is to

212. Hook, “Introduction,” vii-xxiii.

213. Boisvert, *Dewey’s Metaphysics*, 2.

214. Boisvert, 2.

understand his ‘principle of continuity;’”²¹⁵ “The assumption of continuity is prevalent in Dewey’s thought and critical to a proper understanding of his position;”²¹⁶ “[Continuity is] undoubtedly the most fundamental principle in Dewey.”²¹⁷ Yet, I suggest that “continuity” can only be properly understood in explicit reference to process ontology, and no Deweyan scholar has yet made this direct connection.²¹⁸ In this section, I will elaborate the process metaphysical basis of ontological continuity and show how the qualitative in Dewey’s thought is likewise only understood in reference to this rendering of continuity. Linking these two concepts is necessary, in turn, for understanding the following key ideas at the heart of Dewey’s theory of mind and inquiry: the *inclusive integrity of experience*; *life is an integration*; and *there is no such thing as an independent, isolated event, process, occurrence, affair, or function*. I will discuss these independently below and inclusively in the context of autopoietic life in the following chapter.

Dewey’s anti-foundationalism is much discussed,²¹⁹ but the basis of this in process ontology has not been directly identified. One of the main differences between a substance ontological and process ontological paradigm is that many traditional metaphysical accounts seek and believe that there is a “fundamental level” of reality, whereas this concept is anathema to process ontology. The concept simply does not exist within an emergent process ontology. Instead, on the process approach, “the world consists of organized fields in process, all the way

215. Thomas Alexander, “Dewey, Dualism, and Naturalism,” in *A Companion to Pragmatism*, ed. John R. Shook and Joseph Margolis (Malden, MA: Blackwell, 2006), 189.

216. Boisvert, *Dewey’s Metaphysics*, 68-69.

217. Richard J. Bernstein, *John Dewey: On Experience, Nature, and Freedom* (New York, NY: Liberal Arts, 1960), 180.

218. Paul Cherlin (2015, 2017) has recently explicated the emergent, continuous, qualitative nature of Dewey’s metaphysics in a manner largely coincident with my account, but even Cherlin does not mention the basic distinction between substance metaphysical and process metaphysical paradigms. For an overview of this categorization of two basic metaphysical programs, see Johanna Seibt, “Process Philosophy,” in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta, Winter 2018 (Metaphysics Research Lab, Stanford University, 2018), <https://plato.stanford.edu/archives/win2018/entries/process-philosophy/>.

219. Richard Shusterman, “Dewey on Experience: Foundation or Reconstruction?” in *Dewey Reconfigured: Essays on Deweyan Pragmatism*, eds. Casey Haskins and David I. Seiple (Albany, NY: SUNY Press, 1999), 193.

up and all the way down...*no processes are basic*...because space-time is continuous...*any* process, no matter how micro, consists of yet smaller processes, ad infinitum.”²²⁰ Daniel Nicholson and John Dupré affirm this ontological feature as manifest in the living, biological world. They assert that the living world is not a hierarchy of things or entities but “a dynamic hierarchy of processes, stabilized at different timescales.”²²¹ This hierarchy, moreover, being constitutively defined by dynamicity and emergence, is continuous such that “we cannot pick out any level in the hierarchy as ontologically or causally primary.”²²² Likewise, in his discussion of mind and cognition as “a pattern-forming, self-organized system governed by nonlinear dynamical laws,” Scott Kelso notes that in self-organizing systems such as the living world, “no single level is any more or less fundamental than any other.”²²³

Dewey’s process ontology likewise rejects the notion of a fundamental level of reality at which there exist basic particulars, ontologically independent entities, or indivisible elements (LW12:155). Instead, “nature...[consists] of events rather than substances, it is characterized by *histories*, that is, by continuity of change” (LW1:5-6; emphasis original). Nature is constituted by an ontologically continuous “complex of events” (LW1:66) in which “every event is effect of something and cause of something else...every particular existence is both conditioned and condition” (LW1:74). “Every event as such is passing into other things, in such a way that a later occurrence is an integral part of the *character* or *nature* of present existence” (LW1:92; emphasis original). In short, “there is no isolated occurrence in nature” (LW1:207).

220. Campbell, “A Process-Based Model,” 459. Emphasis original.

221. Dupré and Nicholson, “A Manifesto for a Processual Philosophy of Biology,” in *Everything Flows: Toward a Processual Philosophy of Biology*, eds. Nicholson and Dupré (New York: Oxford, 2018), 3.

222. Dupré and Nicholson, “A Manifesto for a Processual Philosophy of Biology,” 27.

223. Kelso, *Dynamic Patterns*, 26.

In Dewey's process ontology, reality/nature as such is constitutively and pervasively *qualitative*. The qualitative nature of reality cannot be named, but it can be (somatically) experienced:

Immediacy of existence is ineffable, but there is nothing mystical about such ineffability; it expresses the fact that of direct existence it is futile to say anything to one's self and impossible to say anything to another. Discourse can but intimate connections which if followed out may lead one to have an existence. Things in their immediacy are unknown and unknowable... Immediate things may be *pointed to* by words, but not described or defined. (LW1:74-75; emphasis original)

It is "impossible," Dewey says, to directly describe or name "immediate existence" – Dewey's term for "reality/nature *qua* reality/nature." Philosophy and science – inquiry generally, or as such – "makes claim to disclose not the inner nature of things but only those connections of things with one another that determine outcomes and hence can be used as means. The *intrinsic* nature of events is revealed in experience as the immediately felt qualities of things" (LW1:6, emphasis original; cf. LW1:112-13; LW12:74). "Sentiency in itself," Dewey explains, "is anoetic; it exists as any immediate quality exists, but nevertheless it is an indispensable means of any noetic function" (LW1:199).²²⁴ Here, Dewey is describing what neurophysiological research has now confirmed empirically:

Cognition...cannot be taken to involve the brain processing symbols that stand for external elements, manipulating representations and then computing a response that is adequate in the light of prevailing circumstances. Although we humans frequently speak as if we know about the 'real world' and can accurately perceive the 'things' in it, this is a biological impossibility.²²⁵

224. For contemporary research supporting these claims, see, e.g., Daniel D. Hutto and Erik Myin, *Radicalizing Enactivism: Basic Minds without Content* (Cambridge, MA: The MIT Press, 2012); and Michael D. Kirchhoff and Tom Froese, "Where There Is Life There Is Mind: In Support of a Strong Life-Mind Continuity Thesis," *Entropy* 19, no. 4 (2017): 169, <https://doi.org/10.3390/e19040169>.

225. John Brocklesby, "Reconnecting Biology, Social Relations and Epistemology – A Systemic Appreciation of Autopoietic Theory," *International Journal of General Systems* 33, no. 6 (2004): 660.

As I will discuss in more depth in chapters three and four, for Dewey's theories of mind and inquiry it is essential to take him directly and literally when he says that nature itself, and as such, *is quality*, or qualitativens. "Quality is quality, direct, immediate, and undefinable" (LW1:92). Felt, had, or experienced qualities are not subjective or contained within the mental experience of individuals: "qualities never were 'in' the organism; they always were qualities of interactions in which both extra-organic things and organisms partake" (LW1:198-99). Qualities pervade natural events and unify them into experienceable situations (LW12:73, 115, 207).

The "inclusive integrity of experience"

Throughout his later work and especially *Experience and Nature*, Dewey stresses the importance of the "inclusive integrity of experience" (LW1:19) for his naturalistic empiricism. The "integrated unity" of experience/nature is "the starting point for philosophical thought" (LW1:19). This unity, moreover, is ineffable because it is characterized by the functionally integrated unity of qualities that analytic thought discriminates into a wide range of dualistic concepts. Dichotomies, dualities, or opposites such as stability-precarity, one-many, subject-object, experience-nature, mind-world, mental-physical, cause-effect, fixed-changing, and actual-possible are, in an ontology of continuity, "inextricabl[y]" and "vitally" mixed (LW1:46-47). Existential events in their immediacy are qualified by the tensional, functional *integrity* of these abstracted terms, which is to say that in existence as such, there is not some thing, essence, power, or quality of *stability* and, separately from that, some thing, essence, or power of *precarity*, which somehow *relates to* stability. There is no "in between" such qualities. This is what Dewey means by such qualities being "mixed not mechanically but *vitally*...we may recognize them separately but we cannot divide them" (LW1:47). This is so crucial to Dewey's ontology that he dedicates an entire chapter of *Experience and Nature* to discussing this

“complementary”²²⁶ nature of what dualistic metaphysics separates as independent features, functions, processes, or powers of reality.

Immediate, qualitative experience is ineffable because “in its primary integrity no division [exists] between act and material, subject and object, but contains them both in an unanalyzed totality” (LW1:18). “Gross experience is loaded with the tangled and complex” (LW1:32). Dewey elaborates:

Natural events are so complex and varied that there is nothing surprising in their possession of different characterizations, characters so different that they can be easily treated as opposites. Nothing but unfamiliarity stands in the way of thinking of both mind and matter as different characters of natural events, in which matter expresses their sequential order, and mind the order of their meanings in their logical connections and dependencies. ... That to which both mind and matter belong is the complex of events that constitute nature. This becomes a mysterious *tertium quid*, incapable of designation, only when mind and matter are taken to be static structures instead of functional characters. (LW1:66; emphasis original)

What unifies all supposed opposites or dualistic elements of experience is the pervading *quality* of a situation (LW12:73-74; 218). This is why direct experience – that is, nature/reality as such – cannot be named. It is *simultaneously* precarious and stable, certain and uncertain. It is not that it is sometimes purely stable and other times purely precarious. It is always both, all the time, functionally unified in an “unanalyzed totality” and therefore can only be qualitatively felt, but not named or described (LW1:18; LW12:74).

Life is an integration

Extending the insights from the previous section, it must be stressed that for Dewey and the autopoietic view of life, life is “*an integration*” (LW12:32; emphasis added). All life on Earth, life as such, is a functionally integrated and unified whole. This notion of the entire Earth

226. More recently, Scott Kelso and David Engstrom developed this notion through the concept of “complementarity,” elaborated in book length: J. A. Scott Kelso and David A. Engstrom, *The Complementary Nature* (Cambridge, MA: The MIT Press, 2006).

functioning as an integrated, unified organism was first systematically developed in Western academic science in the 1970s by James Lovelock and Lynn Margulis, who named their idea the “Gaia hypothesis.”²²⁷ Indeed, Boisvert argues that for Dewey, “the entire universe, in fact, ‘is an organism.’”²²⁸

It is not necessary for my inquiry to extend the analysis to the entire cosmos, but the point is instructive. Recalling the above discussion of ontological continuity in a process metaphysics, all living process systems are integrated into a unified whole such that no independently-discernible level or component part of that whole has ontological or causal primacy. This includes abstract constructs such as “environment” and “organism;” neither can be said to exist antecedently or independently from the whole of life as a unified process system. As Dewey asserts, “integration is more fundamental than is the distinction designated by interaction of organism *and* environment” (LW12:40; emphasis original). Anticipating slightly, it is well to stress that for Dewey all such “distinctions” – i.e. namings, describings, termings, symbolizings, etc. – do not name or reflect antecedently-existing objects or existences but are instituted in the course of inquiry as predictive functions to help guide the literal, tangible, existential reconstruction of qualitative situations (LW1:218-19; LW12:162).

No isolated or independent events

In close relation to the fact that life is an integration is the claim that in a continuous process ontology, there is no such thing as an isolated, independent, or antecedently existing event. As Campbell notes, “processes exist *only* in some organization or other. There is nothing to a field without its organization.”²²⁹ Dewey makes the point this way:

227. James Lovelock, *Gaia: A New Look at Life on Earth*, Reprint edition (New York, NY: Oxford University Press, 2016).

228. Boisvert, *Dewey’s Metaphysics*, 36.

229. Campbell, “A Process-based Model for an Interactive Ontology,” 460.

by the very nature of the case the psychological treatment [of the *process* of perception] takes a singular object or event for the subject-matter of its analysis. In actual experience, there is never any such isolated *singular* object or event; *an* object or event is always a special part, phase, or aspect, of an enviroing experienced world—a situation. (LW12:72; emphasis original)

One of the primary goals of Dewey's principle of continuity is to deny the possibility of any truly independent event or existence, which is why it makes no sense to try to name or describe "things" as antecedent existences. As noted above, Dewey regards nature as an ontologically continuous "complex of events" (LW1:66) in which "every event is effect of something and cause of something else...every particular existence is both conditioned and condition" (LW1:74). What there "is" are "fields of interaction" (LW1:201, 207-08) qualified by various "functional characters" such as "mind" and "matter" (LW1:66). Nothing can be described or identified separate from its functional role within some "field of interacting events" (LW1:201): "anything changes according to the interacting field it enters" (LW1:217). In short, "there is no isolated occurrence in nature" (LW1:207).

A Note on "Understanding" Dewey, Given an Ontology of Ineffability

There is an irony in the propositional, discursive, dialectical presentation of Dewey's ontology and derivative theory of inquiry. The irony is that Dewey is attempting to explain, via denotative language, that it is impossible to denote reality as such. The easy critique of this is to claim that it is self-refuting or self-defeating because it is self-contradicting or at least inconsistent. As I discuss below, however, Dewey openly embraces such circularity. Moreover, he is not unaware of this irony at the heart of his reconstruction of philosophy and he thereby explains what this means for "understanding" his position.

On the first page of the opening chapter of *Experience and Nature*, Dewey identifies this dilemma: after introducing the basic problem of the traditional separation of experience from

nature he declares that “I know of no route by which dialectical argument can answer such objections. They arise from associations with words and cannot be dealt with argumentatively. One can only hope in the course of the whole discussion to disclose the meanings which are attached to ‘experience’ and ‘nature,’ and thus insensibly produce, if one is fortunate, a change in the significations previously attached to them” (LW1:10). In later works, he is more prescriptive and literal about the situation, claiming that one cannot directly “understand” (via dialectical, conceptual reasoning and interpretation) his conceptions of inquiry and qualitative thought. Instead, he explains that to “understand” the realities he is trying to point to (but not directly *describe*, as is impossible, per above) requires quite literally *having an experience* of the sort he is claiming characterizes reality – i.e., an immediate, ineffable, qualitative experience. In “Qualitative Thought,” Dewey explains that

The foregoing remarks are intended to suggest the significance as to be attached to the term ‘qualitative thought.’ But as statements they are propositions and hence symbolic. Their meaning can be apprehended only by going beyond them, by using them as clues to call up qualitative situations. When an experience of the latter is had and they are re-lived, the realities corresponding to the propositions laid down may be had. (LW5:252)

It is no coincidence that Humberto Maturana and Francisco Varela – who coined the term “autopoietic” to describe the theory of life that Dewey developed in his own way, see chapter three – come to the same conclusion: “Nothing we are going to say will be understood in a really effective way unless the reader feels personally involved and *has a direct experience* that goes beyond all mere description.”²³⁰ Dewey explicitly says that to understand him – that is, to “apprehend [the] meaning” of his propositional statements concerning the qualitative nature of thought – requires *having a qualitative experience*. We can only understand Dewey “by going beyond” the symbolic, i.e. linguistic-discursive, description of the qualitateness of reality and

230. Humberto Maturana and Francisco Varela, *The Tree of Knowledge: The Biological Roots of Human Understanding* (Boston, MA: Shambala, 1992), 18. Emphasis added.

experiencing this quality immediately and directly, which is to say non-discursively and non-conceptually.

Dewey makes a similar suggestion in *Logic: The Theory of Inquiry*. He says that for both lay readers and professional philosophers alike, the most effective way to “get” his theory of inquiry is to *experience* the process of inquiry he is describing propositionally and abstractly:

Readers not particularly conversant with contemporary logical discussions may find portions of the text too technical, especially perhaps in Part III. I suggest that such readers interpret what is said by calling to mind what they themselves do, and the way they proceed in doing it, when they are confronted with some question or difficulty which they attempt to cope with in an intellectual way. If they pursue this course, I think the general principles will be sufficiently intelligible so that they will not be unduly troubled by technical details. It is possible that the same advice is applicable in the case of those whose very familiarity with current logical literature constitutes an obstruction to understanding a position that is at odds with most current theory. (LW12:4)

These admonitions to directly experience for oneself – rather than analytically make sense of – the qualitative, ineffable processes and experiences Dewey is intending to explain are in fact theoretically and methodologically consistent with the claims he is making, for Dewey’s goal is to restore to inquiry “the primacy and ultimacy of gross experience” (LW1:24). In other words, Dewey argues that non-discursive, somatic experiencing manifests “an efficiency of operation which it is *impossible for thought to match*. Even our most highly intellectualized operations depend upon [somatic experiencing] as a ‘fringe’ by which to guide our inferential movements” (LW1:227; emphasis added).

When Dewey’s ultimate goal is experientially grasped, however, the irony of describing the impossibility of describing reality is turned on its head. That is, the real irony is missing Dewey’s explicit claim about his goal of his major philosophical treatise, *Experience and Nature*, because the reader is so preoccupied with making conceptual-analytic sense of what Dewey writes. That is, Dewey did not articulate his pragmatism in hopes of providing conceptual

answers to long-standing philosophical problems. Instead, his strategy for moving beyond intractable debates about mind-body, realism-idealism, objective-subjective, and the like was to discuss these issues in such a way as to prompt the reader to *have for themselves* a nondual – i.e. continuous – experience of the kind he claimed characterizes living processes. This is consistent with the expressly-stated goal of his written work, which is the encouragement of an applied, somatically-grounded method of inquiry capable of assisting people in intelligently working through daily social challenges rather than the construction of a theoretically complete philosophical system that could satisfy conceptual challenges as posed by professional philosophers. As he says at the end of the opening chapter of *Experience and Nature*, “if what is written in these pages has no other result than creating and promoting a respect for concrete human experience and its potentialities, I shall be content.” (LW1:41)

Chapter Three – Living Process Systems: The Autopoietic Theory of Life

Introduction: Dewey's Autopoietic Theory, Emergence, and Transaction

In this chapter, I provide an overview of the autopoietic view of life-mind at the center of Dewey's theory of emergent mind and conception of inquiry as a naturalistic process wholly continuous with the operations of living systems. This section will entail drawing from process metaphysics, dynamic systems theory, and the autopoietic theory of life to explain the key concepts of Dewey's account of naturalistic inquiry: *continuity*, *emergent organization*, and *function*. Integrating these concepts yields a pragmatic life-mind continuity thesis, wherein life is defined as an autopoietically-organized qualitative whole in which component processes – such as subjective mind – emerge through and as a serving a function of supporting the autopoietic organization of the whole that defines the functional nature of those processes that sustain the whole that constitutes them.

Having established in the previous chapter that in Dewey's process pragmatism reality is a qualitatively unified continuous whole, it remains to explain what distinguishes living from non-living systems. For if all of nature is a continuous, unified "complex of events" (LW1:66), what justifies our identifying some of those events as living events and others as inanimate events? What are the criteria for this distinction? Dewey's answer is that living systems feature a unique form of organization, namely *autopoietic* organization, from which emerges the creative function of sustaining living activity through the continual reconstruction of existential situations according to the dynamical transactivity of self-organizing systems.

Although Dewey did not originate the term "autopoiesis," he was one of the first to systematically develop this definition of living systems. The term itself was not coined until 1972 by Humberto Maturana and Francisco Varela, Chilean biologists and neuroscientists who came to the ontological and epistemological questions of life and mind through their research on

visual perception in frogs.²³¹ First comprehensively published in *Autopoiesis and Cognition: The Realization of the Living* in 1973, the autopoietic theory of life states that “cognition and the operation of the living system [are] the same thing.”²³² The term *autopoiesis* is a combination of the Greek *αὐτο* (“self”) and *ποίησις* (*poiesis*, meaning “creation” or “production”). Thus, autopoietically-organized systems are “continually self-producing.”²³³

This section will establish the process ontological definition of living systems as *emergent functions* of naturalistic events rather than “things” as is typical of substance metaphysical definitions.²³⁴ Defining life as an interplay of self-organized processes tensionally stabilized across multiple, mutually constituting timescales and mereological levels is the basis of Dewey’s parallel definition of mind and subjective mind as “[functional] characters of natural events” rather than “static structures” (LW1:66) or “underlying and ultimate substances” (LW1:5). This is the core – albeit in simplistic form – of the life-mind continuity thesis and forms the basis for the elucidation of Dewey’s theories of mind and inquiry in chapter four. The autopoietic organizing of living systems is likewise necessary for understanding Dewey’s definition of “subjective mind” as an “agency of novel reconstruction of a pre-existing order” (LW1:168). I discuss all of this in chapter four.

Detailing the autopoietic theory of life embedded in Dewey’s “emergent naturalism”²³⁵ also serves the following functions:

- 1) this demonstrates Dewey’s claim that questions of knowing, acting, mind, and “the nature of the real world...are completely bound up with one another, and their consequences ramify into practically all important ideas entertained upon any philosophic question” (LW4:19).

231. Humberto Maturana and Francisco Varela, *Autopoiesis and Cognition: The Realization of the Living* (Boston, MA: D. Reidel, 1980).

232. Maturana and Varela, xvi-xvii.

233. Maturana and Varela, *The Tree of Knowledge*, 43.

234. Campbell, *The Metaphysics of Emergence*, 2; 154.

235. Paul Cherlin, “John Dewey’s Emergent Naturalism: Conditions and Transfigurations,” *Contemporary Pragmatism* 12 (2015): 199-215.

Such questions, therefore, “cannot be attacked in isolation [because they are] too thoroughly entangled with fundamental beliefs and ideas in all sorts of fields” (LW4:20);

2) it explains the latter two metaphysical premises that Dewey says must be revised in order to avoid the mind-body problem; and

3) following from 1) and 2), this shows the necessity of a process ontology for properly interpreting Dewey’s theories of mind and inquiry and the importance of process philosophy as a metaphilosophical framework that can integrate the many elements of the life-mind continuity thesis at the heart of Dewey’s reconstruction of philosophy.

In the previous chapter I discussed the first of the three key metaphysical assumptions that Dewey claims must be revised in order to demonstrate the dubiousness of the mind-body problem: “the denial of quality in general to natural events.” In this section, I will explain the second two metaphysical premises: “the ignoring in particular of temporal quality and the dogma of the superior reality of ‘causes’” (LW1:194). Making sense of these premises through a process ontological, autopoietic framework also explains a key term in Dewey’s pragmatism that is often neglected: *transaction*.²³⁶ As Shannon Sullivan offers, “it is no exaggeration to claim that the concept of transaction is key to every aspect of Dewey’s philosophy, including his aesthetics, ethics, social and political philosophy, metaphysics, and epistemology. Rarely, however, has it been made explicitly central to the work of theorists influenced by his pragmatism.”²³⁷ I suggest that theorists fail to grasp and make use of the importance of *transaction* because it can only be properly understood in the context of Dewey’s process-autopoietic view of life, and very few scholars have interpreted Dewey through this theoretical framework.

236. Jim Garrison, “An Introduction to Dewey’s Theory of Functional ‘Trans-Action’: An Alternative Paradigm for Activity Theory,” *Mind, Culture, and Activity* 8, no. 4 (November 2001): 275–96, https://doi.org/10.1207/S15327884MCA0804_02.

237. Shannon Sullivan, *Living Across and Through Skins: Transactional Bodies, Pragmatism, and Feminism* (Bloomington, IN: Indiana University Press, 2001), 8.

Dewey's Autopoietic View of Life

Dewey describes the autopoietic nature of living systems in the following passage in *Experience and Nature*:

The difference between the animate plant and the inanimate iron molecule is not that the former has something in addition to physico-chemical energy; it lies in the *way* in which physico-chemical energies are interconnected and operate, whence different *consequences* mark inanimate and animate activity respectively. For with animate bodies, recovery or restoration of the equilibrium pattern applies to the complex integrated course or history. In inanimate bodies as such, 'saturation' occurs indifferently, not in such a way as to tend to continue a characteristically organized activity; they tend to utilize conserved consequences of past activities so as to adapt subsequent changes to the needs of the integral system to which they belong. Organization is a fact, though it is not an original organizing force. Iron as such exhibits characteristics of bias or selective reactions, but it shows no bias in favor of remaining simple iron; it had just as soon, so to speak, become iron-oxide. It shows no tendency in its interaction with water to modify the interaction so that consequences will perpetuate the characteristics of pure iron. If it did, it would have the marks of a living body, and would be called an organism. Iron as a genuine constituent of an *organized* body acts so as to tend to maintain the type of activity of the organism to which it belongs. (LW1:195; emphasis original)

In this passage, Dewey describes – albeit somewhat covertly – the emergent, functional ontology of living systems. Living systems are not distinguished from inanimate systems by their containing different kinds of *substance* – “[living systems do not have] something in addition to physico-chemical energy” – but by their unique mode of *functional organization* – “the difference... lies in the *way* in which physico-chemical energies are interconnected and operate, whence different *consequences* mark inanimate and animate activity respectively.”

It must be stressed that in saying that living systems do not have anything more than “physico-chemical energy,” Dewey is *not* thereby encouraging nor even allowing a physicalist-reductionistic definition of organisms as “nothing but” an arrangement of physical particles.²³⁸

238. For a discussion of the reductionistic explanatory strategy of “nothing but” common among materialist and physicalist systems, see Steven Horst, *Beyond Reduction: Philosophy of Mind and Post-Reductionist Philosophy of Science* (New York, NY: Oxford University Press, 2007), 80-81.

This interpretation of Dewey is a plain misreading of his ontology, for he explicitly says that “‘matter,’ or the physical...is not itself an event or existence” (LW1:200-01). He explains that

The idea that matter, life and mind represent separate kinds of Being is a doctrine that springs, as so many philosophic errors have sprung, from a substantiation of eventual functions. The fallacy converts consequences of interaction of events into causes of the occurrence of these consequences—a reduplication which is significant as to the *importance* of the functions, but which hopelessly confuses understanding of them. (LW1:201; emphasis original)

Both “mind” and “matter” are “[functional] characters of natural events” (LW1:66) rather than “underlying and ultimate substances” (LW1:5). “What we call matter,” Dewey explains, “is that character of natural events which is so tied up with changes that are sufficiently rapid to be perceptible as to give the latter a characteristic rhythmic order, the causal sequence. It is no cause or source of events or processes...no substance behind or underlying changes...The name [“matter”] designates a character in operation, not an entity” (LW1:65). This means that in an emergent process ontology, the notion of “reducing” emergent wholes (such as persons) to their physical or material parts is nonsensical, for living systems *as* emergent are by definition *not* aggregations of lower-level parts. I will return to this idea below, after detailing the key characteristics of autopoietic organization.

Recalling the discussion in chapter two, for Dewey’s process ontology, *all* reality is a complex of fields of interactivity. In the passage above, Dewey does not discuss the difference between inanimate *objects*, *things*, or *entities* and living *things* or *entities*; there is simply “inanimate and animate *activity*” (LW1:195; emphasis added). And the distinguishing feature of animate activity is the *functional* capacity enabled by a peculiar sort of *organization* of “physico-chemical energies.” The peculiar sort of organization of living activity is that it is “self-maintaining,” which is to say autopoietic:

[A]s long as life normally continues, the interactions in which organic and environmental energies enter are such as to maintain the conditions in both of them needed for later interactions. The processes, in other words, are self-maintaining, in a sense in which they are not in the case of the interactions of non-living things. (LW12:33)

It is important to emphasize that the criterion for living systems is not that they are organized and that inanimate systems are *not* organized. In a process ontology, *all* existents are organizations of process. As Campbell says, “processes exist *only* in some organization or other. There is nothing to a field without its organization.”²³⁹ As cohesive process systems,²⁴⁰ phenomenal events such as rocks, tables, and mountains are organized. But it is not organization alone that qualifies an event as living. As Dewey says, “organization is a fact, though it is not an original organizing force” (LW1:195). It is the *consequences* of an organized system of processual activity that determines whether the system is animate or inanimate.

The term “autopoiesis” literally (etymologically) means “self-producing.” The *functional outcome* (or “consequence” as Dewey says) of autopoietic organization is to maintain autopoietic organization. In other words, autopoietic organization is defined precisely *as* this functional activity and its self-sustaining outcome, which co-exist as a unified phenomenon. As early as 1917, Dewey understood this phenomenon as establishing the basis of a radically new way to understand philosophy and inquiry. In his essay “The Need for a Recovery of Philosophy,” Dewey discusses the biological basis and nature of thinking and identifies the autopoietic nature of living systems. There, he explains that the defining functional characteristic and purpose of life activity is to support further life activity, whose purpose it is then to support further life activity, and so on, ad infinitum (MW10:7-8; see also LW1:162, 194-96). The term “self-producing” can be misleading, however, insofar as it is interpreted to mean that there is first a

239. Campbell, “A Process-based Model for an Interactive Ontology,” 460. Emphasis original.

240. Campbell, *The Metaphysics of Emergence*, 141.

self, who then acts in a certain way, and then that acting produces something separate or in addition to that self. Rather, the “self” *just is* the functioning that maintains the activity that serves the function of maintaining the activity that is the “self.”

Here we can see the import of understanding Heraclitus’ analysis of change and identity, which presents the same basic thesis. That is, in a process ontology, the identity of some “thing” – say *A* – is a continual process of change. *A* maintains its identity as *A* by “changing” just because *A* is a process of continual change. In like fashion, an autopoietic system is defined as the process of maintaining the autopoietic process, which is more specifically defined as a unique form of change (i.e., the basis of metabolism, per below). Indeed, as Maturana and Varela explain, this is a singular, unified phenomenon; there is not first a thing that then *engages in* a process, there is simply process.²⁴¹ This is the basis of Dewey’s rejection of ontological duality in favor of ontological continuity (see footnote 197 above). As Nicholas Rescher explains, “instead of a two-tier reality that combines things with their inevitable coordinated processes, [process ontology] settles for a one-tier ontology of process alone. ...It replaces the troublesome ontological dualism of *thing* and *activity* with an internally complex monism of activities of varying, potentially compounded sorts.”²⁴²

Where Rescher claims that process ontology replaces dualism with monism, it should be said that Dewey directly critiques this: “dualism appears to me only two monisms stuck loosely together, so that all the difficulties in monism are in it multiplied by two. If my position must be labeled, I should prefer to call it empirical pluralism, for it is actuated by respect for the plurality of observable facts” (MW10:64). The following sub-sections will explain the ontological

241. Humberto R. Maturana and Francisco J. Varela, *The Tree of Knowledge: The Biological Roots of Human Understanding*, Revised (Boston, MA: Shambhala, 1992), 46.

242. Nicholas Rescher, *Process Philosophy: A Survey of Basic Issues* (Pittsburgh, PA: University of Pittsburgh Press, 2000), 9. Emphasis added.

principles necessary for making sense of the connection between process ontology and autopoiesis.

Autopoietic Organization: Diachronic, Dynamic, Holistic

There are three key characteristics of autopoietically organized systems that qualifies such systems as living. Such organization is *diachronic*, *dynamic/non-linear*, and *holistic*. The diachronic dimension correlates to what Dewey calls “temporal quality,” the dynamic dimension correlates to Dewey’s critique of the “dogma of the superior reality of ‘causes,’” and the holistic dimension correlates to Dewey’s notion of transaction. These three characteristics of living systems are interrelated and only make sense within a process ontological paradigm. As Dupré and Nicholson claim, “process ontology...is far more attuned to and concordant with the understanding of the living world provided by the findings of contemporary biology than its substantialist rival.”²⁴³ Elaborated through a process ontology, the autopoietic organization of living systems is seen to manifest the characteristic feature of existents in a process paradigm, as explained above: there is not *thing* and *activity* (e.g. a person and their behavior), there is simply activity. (Technically, *transactivity*.) In short, living systems as emergent functions means that the *being* and *doing* of autopoietic systems are wholly continuous. Moreover, this demonstrates the continuity of methodology (doing) and ontology (being). This is what Dewey means by experience being “double-barreled...it includes *what* [ontology/being] men do and suffer...and also *how* [methodology/doing] men act and are acted upon...in short, processes of *experiencing*” (LW1:18; emphasis original). Such processes of experiencing, Dewey explains, “are mixed not mechanically but vitally like the wheat and tares of the parable. We may recognize them

243. John Dupré and Daniel J. Nicholson, “A Manifesto for a Processual Philosophy of Biology,” in *Everything Flows: Toward a Processual Philosophy of Biology*, eds. Nicholson and Dupré (New York: Oxford, 2018), 22.

separately but we cannot divide them, for unlike wheat and tares they grow from the same root” (LW1:47).

Temporal Quality: The Diachronic Dimension of Autopoietic Organization

As noted above, the organization of autopoietic systems is not static like the organization of inanimate systems. Recent work in process metaphysics provides a more nuanced explanation of the difference between inanimate and living systems. The key distinction is in the types of *stability* manifest by inanimate process systems and process systems worthy of the name “living.” Campbell explains that among cohesive, persistent systems (a term unique to his process metaphysical taxonomy of levels of process organization), patterns and processes of stability manifest along a continuum whose end-points are marked by *energy-well* and *far-from-thermodynamic equilibrium* stability. An exemplary case of energy-well stability is an atom, “whose mode of organization ensures that they persist at or near thermodynamic equilibrium for a significant period and can be disrupted only by an input, from external sources, of a critical level of energy.” Far-from-thermodynamic equilibrium stability, on the other hand, is characteristic of living systems, including the Earth itself.²⁴⁴

The unique feature of systems stabilized in a condition of far-from-thermodynamic equilibrium (hereafter FFE) is that the maintenance of that condition requires a constant and measured transaction of energies through the system’s enviroing medium. This is the basis of *metabolism*. Rocks, obviously, do not perform metabolic functions, but all living systems (as defined here²⁴⁵) metabolize. Metabolic activity on the biological level can be understood in terms

244. Campbell, *The Metaphysics of Emergence*, 146-49.

245. It should be noted that recent work in process biology (John Dupré and Maureen A. O’Malley, “Varieties of Living Things: Life at the Intersection of Lineage and Metabolism,” *Philosophy and Theory in Biology* 1, no. 1 (2009): 1–25; Maureen A. O’Malley, “The Ecological Virus,” *Studies in History and Philosophy of Science* 59 (October 2016): 71–79) and metagenomics (Brigitte Nerlich and Iina Hellsten, “Beyond the Human Genome: Microbes, Metaphors and What It Means to Be Human in an Interconnected Post-Genomic World,” *New Genetics and Society* 28, no. 1 (March 2009): 19–36) has even complicated and relativized the distinctions between animate

of the laws of thermodynamics in FFE process systems. In order to maintain itself, an organism must *act* in various ways (searching for and consuming food, for example), and this activity manifests as *work*, which is a conversion of ordered energy (negentropy) into disordered energy (entropy). Work necessarily increases the entropy in a system, which must be maintained below a certain level if the organism is to persist. Hence, the organism produces waste products as a means of maintaining the “characteristic pattern of active equilibrium” that for Dewey defines living systems (LW1:194).

In short, in living systems, what is being maintained is not a static organizational *state* but a *functional organization that sustains itself by changing itself*. This process of change, as Dewey describes it, is the “continual rhythm of disequilibrations and recoveries of equilibrium” (LW12:34). What drives and sustains this process of change is a productive tension between entropic and negentropic activity. As Inna Semetsky writes, “Dewey's *tension*, thereby, is the necessary presence of instability or uncertainty that serves as a precursor for the system's self- or re-organization.”²⁴⁶ The biological term for this is “need,” as Dewey explains in *Logic*. Need is a constant factor in living systems (LW12:35), which means that living systems are also thereby constituted by an ineradicable degree of *tension* or “stress.” I will return to this notion of “stress” in the final chapter.

(i.e. living) and inanimate (non-living) systems, for instance among organisms, viruses, and bacteria and their ecological-environmental niches, and their respective metabolic sources and functions. These discussions entail incorporating extensive degrees of phenomenal and interpretive complexity involving mutually-relative constitutions of system boundaries based on multi-dimensional parameters such as overlapping timescales, dynamic and trans-spatial geographic instantiations, and context-relative, self-recursive functions that change in relation to whatever partial scope of observation or range of effects is included in any given study. All that to say, for as nuanced as Dewey's and contemporary process ontological taxonomies as Campbell's are, the fact of the matter is evidently yet much more complex. This, I believe, only strengthens Dewey's account when read properly, rather than substantively challenging it. In other words, I think Dewey intuited this when he insisted that immediate experience – reality “as such” – is ineffable, and that our conceptual models of it will necessarily fail to adequately capture the amazing complexity of life-reality that the empirical and theoretical sciences are increasingly revealing.

246. Inna Semetsky, “Re-Reading Dewey through the Lens of Complexity Science, or: On the Creative Logic of Education,” in *Complexity Theory and the Philosophy of Education*, ed. Mark Mason (Malden, MA: Wiley-Blackwell, 2008), 82.

The conjunction of entropic and negentropic activity in FFE process systems can be used to explain Dewey's claim that the "active equilibrium" constitutive of living systems is a tensional conjunction of stability (negentropic activity) and precarity (entropic activity) (LW1:32, 42-68). Recent work on Dewey's emergent metaphysics explores the functional mechanisms of maintaining this precariously stable condition of FFE. Paul Cherlin, for instance, argues that in Dewey's emergent naturalism, the activity of inquiry is defined by its creating existential tension or conflict as a means of sustaining the conditions and process necessary for further inquiry.²⁴⁷ In other words, in developing my account of "mindful inquiry" in chapter five, I will argue in similar fashion that autopoietic organization, living activity, biological activity, metabolism, mindful activity, and inquiry are all of a kind.²⁴⁸ Ultimately, each of these terms describes the same basic functional organization of autopoietic activity: the self-sustaining process of sustaining the autopoietic process.

Autopoietic organization – which is the type of dynamic, holistic, emergent, functional organization characteristic of FFE, open process systems²⁴⁹ – is inherently temporal in that it describes a process extended over time and cannot, in principle, be understood or defined synchronically (synchronic: "time reduced to a set of punctuated specifications [or] series of snapshot instances"²⁵⁰). As Campbell notes, "concepts of stability, coherence, and cohesion all involve temporal notions. To be stable, coherent, and cohesive is to manifest those characteristics

247. Cherlin, "John Dewey's Emergent Naturalism," 199-215.

248. Cf. David L. Thompson, "The Self as an Evolved Organism That Lives in a Pragmatically Defined World," in *Pragmatist Neurophilosophy: American Philosophy and the Brain*, ed. John R. Shook and Tibor Solymosi (London: Bloomsbury Academic, 2014), 203–22; and Peter Godfrey-Smith, "Mind, Matter, and Metabolism," *The Journal of Philosophy* 113, no. 10 (2016): 481–506.

249. Campbell, *The Metaphysics of Emergence*, 136-160.

250. Michael D. Kirchhoff, "Extended Cognition and the Causal-Constitutive Fallacy: In Search for a Diachronic and Dynamical Conception of Constitution," *Philosophy and Phenomenological Research* 90, no. 2 (2015): 321, 324.

over time. ...Processes are already inherently temporal.”²⁵¹ The diachronic dimension of autopoietic organization is further explained by the *dynamic* and *holistic* characteristics of such organization, as detailed below.

The Dynamic Nature of Autopoietic Organization: Dewey’s Critique of the “Superior Reality of ‘Causes’”

As discussed in chapter two, a process paradigm of ontological continuity claims that no level of the hierarchy of processes that constitutes reality has ontological or causal priority. This is fundamentally incompatible with the traditional notion of causality as a linear process wherein a temporally-prior event or entity (the cause) functions or acts in such a way as to be responsible for (i.e., directly produce or somehow bring about an effect by virtue of its causative power, which is supposed to be contained within the nature of the causing event *as* causing event) the occurrence or existence of a temporally later event (the effect). In Dewey’s words,

There is no action without reaction; there is no exclusively one-way exercise of conditioning power, no mode of regulation that operates wholly from above to below or from within outwards or from without inwards. Whatever influences the changes of other things is itself changed. The idea of an activity proceeding only in one direction, of an unmoved mover, is a survival of Greek physics. It has been banished from science, but remains to haunt philosophy. (LW1:65)

Dewey is here describing the unique nature of activity characteristic and productive of autopoietic organization: such activity is *dynamic*, or *non-linear*. As Campbell explains, “Almost all dynamical interactions are non-linear; linearity is a real rarity in nature.”²⁵² Non-linearity, self-organization, and emergence are very closely related. Here, I will focus on the nature of “causality” as it pertains to the non-linear activity of complex, emergent systems. Below, I will discuss how this interrelates with the holistic, self-organizing nature of autopoietic systems.

251. Campbell, *The Metaphysics of Emergence*, 145. Emphasis original.

252. Campbell, *The Metaphysics of Emergence*, 209.

Campbell states that “non-linear functions are what are crucial to causal emergence.”²⁵³

He elaborates by explaining that

Processes in complex systems are often non-linear in a more thoroughgoing way; their effects are not proportional to their causes. This non-linearity comes about because of *feedback* amongst the system’s components: each component affects the other components, but these components in turn affect the first component. Thus the cause-and-effect relation becomes *circular*; any change in the first component is fed back via its effects on the other components to the first component itself.²⁵⁴

While modern philosophy has tended to avoid circularity as a pejorative (because self-defeating or inconsistent) characteristic of arguments or conceptions of reality (LW16:260), Dewey openly embraces the circular nature of life, mind, and inquiry. He squarely acknowledges the circularity of inquiring activity that is continuous with the operations of living systems. In *Knowing and the Known*, Dewey and Arthur Bentley write that they “frankly accept” (LW16:78) and embrace “*circularity* – procedure in a circle – openly, explicitly, emphatically” (LW16:62; emphasis original). Moreover, they explain that they “find [circularity] wherever we go, which by us is not merely recognized, but put to work – not deplored but seized upon as a key to observation, description, and controlled inquiry” (LW16:81).

The diachronic, dynamic, and holistic nature of autopoietic organization means that traditional notions of causality and causal relations are fundamentally misleading in the context of the circular organization of living systems.²⁵⁵ This is Dewey’s concern in critiquing the “dogma of the superior reality of ‘causes’” as one of the dubious metaphysical assumptions underlying the mind-body problem. Acknowledging that the very terms “cause” and “effect” are misleading insofar as they are used to identify and isolate independent parts of a living system, Dewey presents an alternative way of understanding “causality” in living systems.

253. Campbell, 209.

254. Campbell, 209. Emphasis original.

255. Maturana and Varela, *Autopoiesis and Cognition*, xviii.

For Dewey, “causality” is not to be understood as a power or force attributable to any individual or isolated component of the organized whole, or integrated unity, of living systems. In an ontology of continuous emergence, “there is no exclusively one-way exercise of conditioning power, no mode of regulation that operates wholly from above to below or from within outwards or from without inwards” (LW1:65). Dewey advocates replacing the term “causality” with the notion of diachronically emergent change through the “sequential order” of living processes:

Causality...consists in the sequential order itself. ... The view held—or implied—by some ‘mechanists,’ which treats an initial term as if it had an inherent generative force which it somehow emits and bestows upon its successors, is all of a piece with the view held by teleologists which implies that an end brings about its own antecedents. Both isolate an event from the history in which it belongs and in which it has its character. Both make a factitiously isolated position in a temporal order a mark of true reality, one theory selecting initial place and the other final place. *But in fact causality is another name for the sequential order itself*; and since this is an order of a history having a beginning and end, there is nothing more absurd than setting causality over against either initiation or finality. (LW1:84-85; emphasis added)

Dewey explains his postulate of continuity in various terms: “Nature is an affair of affairs” (LW1:83; emphasis original); “Empirically...there is a history which is a succession of histories” (LW1:85); a “complex of events [constitutes] nature” (LW1:66). Whether one prefers the term *affairs*, *histories*, *events*, *occurrences*, or *processes*,²⁵⁶ Dewey’s point is that in the case of living systems, “the reality *is* the growth-process itself” (LW1:210; emphasis original). Traditional accounts of causality abstract from the integrated, temporal unity of natural successions of histories and then try to explain parts or phases of that history by reference to the

256. In the literature on process philosophy, there is some debate as to whether these terms are interchangeable or if they should be discriminately used to denote unique phenomena; in the latter case, there is further disagreement as to which terms should refer to which phenomena, and why this is important. As these are highly technical, unsettled, and subdiscipline-specific debates, I will not include a discussion of these issues here, as it would not add anything of substantive importance to my general thesis.

causative power of other parts of that history. As an example, Dewey discusses the mechanistic and teleological/spiritualistic accounts of the relationship between childhood and adulthood.

Dewey then explains that the common fallacy in both accounts is

the breaking up of a continuity of historical change into two separate parts, together with the necessity which follows from the breaking-in-two for some device by which to bring them together again. The reality *is* the growth-process itself. The real existence is the history in its entirety, the history as just what it is. The operations of splitting it up into two parts and then having to unite them again by appeal to causative power are equally arbitrary and gratuitous (LW1:210; emphasis original).

This is a radical feature of Dewey's process pragmatism and has not been adequately appreciated in his theories of mind and inquiry. Ultimately, Dewey is claiming that questions of cause and effect do not directly apply to phenomena such as life and mind. *Cause* and *effect*, technically, are conceptual abstractions that exist on the level of descriptions (i.e., within "universe[s] of discourse" [LW12:74]), but do not exist as such – that is, as antecedent, independent forces or events – in the ontology of living systems: "In existence, or metaphysically, cause and effect are on the same level; they are portions of one and the same historic process, each having immediate or esthetic quality and each having efficacy, or serial connection" (LW1:91). Discussing mechanistic and teleological accounts of causality, Dewey concludes: "Both statements are equally true *descriptively*; neither statement is true in the explanatory and metaphysical meaning imputed to it" (LW1:209; emphasis added).

That "cause" and "effect" do not technically exist within the temporally emergent functional organization of living systems is a crucial component of the autopoietic theory of life. Though the empirical evidence for Dewey's account of causality as "the sequential order itself" was lacking in his day, this is no longer the case. Maturana and Varela make nearly the exact same theoretical claims on the basis of the neurobiology of perception and behavior: "The notion of causality is a notion that pertains to the domain of descriptions, and as such it is relevant only

in the metadomain in which the observer makes his commentaries and cannot be deemed to be operative in the phenomenal domain, the object of description.”²⁵⁷ And while there is still discussion of the nuances and details of the matter, recent work in the philosophy of biology affirms that a diachronic, developmental account of emergent “causality” is the most appropriate way of understanding cause-effect relations in living systems.²⁵⁸

That the living world is an integrated, unified series of events in which functional qualities emerge through increasingly complex sequences of interactions is the basis of the life-mind continuity thesis at the heart of Dewey’s theory of emergent mind. Concluding his discussion of causality as the growth-process itself, Dewey clarifies that this principle extends to all living phenomena, including functions of mind: “Substitute for such growth a more extensive history of nature and call it the evolution of mind from matter, and the conclusion is not different” (LW1:210).²⁵⁹ In other words, just as childhood and adulthood are abstractions from an integrated, emergent, continuously-developing (i.e. unending) process of growth, so are “matter” and “mind” abstractions from the continuous, emergent development of life that is the “history of nature.”

Function as a Holistic Property of Autopoietic Systems: Transactivity

Rejecting a linear model of cause-effect and replacing it with the metaphor of circularity can be misleading, however. Dynamic activity is not literally and unidirectionally circular in the

257. Maturana and Varela, *Autopoiesis and Cognition*, xviii.

258. Rani Lill Anjum and Stephen Mumford, “Dispositionalism: A Dynamic Theory of Causation,” in *Everything Flows: Toward a Processual Philosophy of Biology*, Daniel J. Nicholson and John Dupré, eds. (New York: Oxford University Press, 2018), 61-75.

259. Cf. the more recent claim of Francisco Varela, Evan Thompson, and Eleanor Rosch: “The idea that there is a deep continuity in the principles of self-organization from the simplest living things to more complex cognitive beings...is now a mainstay of theoretical biology and is receiving increasing attention in neuroscience.” Francisco J. Varela, Evan Thompson, and Eleanor Rosch, *The Embodied Mind: Cognitive Science and Human Experience*, Revised (Cambridge, MA: MIT Press, 2016), xix.

sense of simply tracing the path of a one-dimensional circle, as when an artist creates a circle with a compass. Dewey and Bentley explain: “the circularity is not merely round the circle in one direction: the course is both ways round at once in *full mutual function*” (LW16:62; emphasis added). This mutual constitution of function refers to the integrity of the organizational pattern of the system *as a whole* and to the constituent *parts* of that organization. As with all such dualities, Dewey regards “part” and “whole” as conceptual abstractions that in the immediate existentiality of living systems are “mixed not mechanically but vitally” (LW1:47), which is to say they are ontologically and methodologically continuous. In other words, when Dewey says that life is “an integration” (LW12:32), he means an *emergent, functional, unified whole*, and *not* an aggregation of “individual” (meaning antecedently and independently existing) parts.²⁶⁰

The “full mutual function” of part and whole²⁶¹ constitutes the functional capacities of organizations of energy that manifest powers and properties definitional of living or animate systems. As Dewey explains:

Whenever the activities of the constituent parts of an organized pattern of activity are of such a nature as to conduce to the perpetuation of the patterned activity, there exists the basis of sensitivity. Each ‘part’ of an organism is itself organized, and so of the ‘parts’ of the part. Hence its selective bias in interactions with environing things is exercised so as to maintain *itself* [original], while also maintaining the whole of which it is a member. ...*This pervasive operative presence of the whole in the part and of the part in the whole* [added] constitutes susceptibility—the capacity of feeling... Responses are not merely selective, but are discriminatory, in behalf of some results rather than others. This discrimination is the essence of sensitivity (LW1:196-97).

260. Campbell, *The Metaphysics of Emergence*, 199.

261. This is another way that Dewey describes the ontological continuity intrinsic to naturalistic events in their immediate occurrence. Part-whole, stable-precarious, one-many, actual-possible, permanence-flux, etc. are existentially conjoined (LW1:67). The names “part” and “whole,” for instance, are analytic abstractions created for the functional or instrumental purpose of directing activity toward a desired end. They are “eventual functions” and thus they do not describe antecedently existing conditions or realities.

It is important to stress that when “the constituent parts of an organized pattern of activity are of such a nature as to conduce to the perpetuation of the patterned activity,” new holistic functions *emerge* in such a way that they cannot, in principle, be explained according to the properties of the “parts” themselves. This is Dewey’s way of describing the *spontaneous, self-organizing* nature of living systems, which results from the non-linear activity of the “parts” of a system. As Campbell explains, “*self-organization* can be defined as the spontaneous creation of a globally coherent pattern out of local interactions. ‘Spontaneous’ here means that no internal or external agent is in control of the process.”²⁶² The “spontaneity” of the emergence of an organizational pattern is a function of the non-linear activity within the system, and this is the basis for defining such organization as a *holistic* feature of the system:

Non-linear interactions produce higher-level entities out of lower-level components by generating a stable system through similar processes of dispersing energy interactions at the component-level across the whole system. As a result, it becomes computationally impossible to follow the detailed component-to-component energetic interactions. The critical difference is between those systems whose cohesion produces aggregative effects and those whose cohesion is produced by dynamical bonds which have non-aggregative, non-linear effects. Combinations of the latter kind bring into being new quantum field organizations, with novel properties. The key point is that the fusion involved produces new unified wholes, with causal powers which cannot be derived by simply referring to the separate causal powers of its elements, considered apart. ...What is metaphysically significant is that, in these cases of nonlinear integration, the properties of the whole are somehow ‘more’ than the aggregation of the properties of its parts – such system properties, and the causal powers of such a system, are *emergent*. Emergence should no longer be viewed as a dubious metaphysical mystery, but as explicable in terms of non-linear functions.²⁶³

Dewey understood that the emergent, holistic functional organization of living systems could not, in principle, be deduced from the activity of the supposed “parts” of such a system, and that therefore a new term was needed to describe this unique, emergent nature of animate activity. His term for this is *transactivity*. As Phillip McReynolds recently explains, Dewey

262. Campbell, *The Metaphysics of Emergence*, 212.

263 Campbell, 210. Emphasis original.

intentionally used the term *transactivity* rather than *interactivity* because an emergently-organized field-based approach to natural events is premised on the notion that the activity of such fields or systems is emergent through and as the organizational dynamics of the system as a whole and cannot be reduced or attributed to the activity of individualized parts:

The key to [field theory is] the idea that all parts of the field are in constant relation with every other part of the field and that one could not really understand one part of the field (or even conceive of it as existing independently) without taking into consideration all other parts of the field. Dewey and Bentley label this new understanding the transactional approach.²⁶⁴

Although McReynolds does not discuss metaphysics or ontology in depth, he does acknowledge that “transaction is a process-oriented approach” whereas “interaction remains a substance-based approach.”²⁶⁵ *Interaction* implies that the activity is *between* two independent, antecedently-existing particles, substances, entities, objects, or organisms. *Transactivity* is meant to designate activity that emerges across and beyond the physical-spatial boundaries of the component parts of a system that reflective thought abstracts as “individuals.” In other words, all living activity is *transactional* in the sense that insofar as any given collection of events functions to maintain the autopoietic organization of a system, such eventual activity is properly attributed to that system *as an emergent whole*. The *trans* in Dewey’s term transactional is meant to specify that living activity *just is* an emergent function obtaining on the level of a system as a unified whole and should not be understood in reference to the “interactivity” obtaining among separate “parts” of such systems.

264. Phillip McReynolds, “Autopoiesis and Transaction,” *Transactions of the Charles S. Peirce Society* 53, no. 2 (2017): 314.

265. McReynolds, 314.

The Irreducibility of Autopoietic Systems as Unified, Emergent Wholes

I will further discuss the functional individuation of component “parts” of living systems in the following chapter. Here, I will summarize the implications for questions of life and mind resulting from the ontological framework developed in this chapter. Among many specific implications that could be discussed, the general upshot of the preceding discussion is that the import of the life-mind continuity thesis for Dewey’s theory of emergent mind can be made clearer. For Dewey, mind is not a mental phenomenon somehow set over and above physical or bodily phenomena. Mind is an emergent, functional character of events, wholly continuous with the operations of living systems understood as autopoietic organizations. In “Body and Mind,” Dewey explains that the “unity of mind and body in action,” mind-body as a “unified wholeness of operation,” *just is* “human life” as such (LW3:27). By defining life as a “unified wholeness of operation,” Dewey is here referring to the diachronic, dynamic, holistic organization of autopoietic systems. By definition, per above, the transactivities of living systems (of which some are characterized by a quality of “mind” as a functional character) cannot be reduced to its component parts: “under no circumstances is a biological phenomenon defined by the properties of its component elements.”²⁶⁶

Therefore, mind also cannot be reduced to component parts. This is the basis of Dewey’s critique of reductionistic attempts to explain mindful phenomena such as consciousness by identifying the “neural correlates” of “instances” of consciousness and mind such as perception, emotion, spirituality, or reflective thought (LW1:256-57). As life defined autopoietically is the temporal process of maintaining the process of autopoiesis, so mind is a “moving equilibrium”

266. Maturana and Varela, *Autopoiesis and Cognition*, 113.

(LW1:188), a “constant change” (LW1:125). As a “moving stream,” mind is a continuous transactive functioning, not a property, power, or faculty of individual existences.

Campbell summarizes the implications of understanding living systems according to the principles of process ontology:

These considerations [of recursively self-maintenant FFE process systems, i.e. autopoietic systems] entail a metaphysic radically different from those which standardly accord priority to entities. Biological systems – including human bodies – are *not* to be understood simply as substantial entities (‘things’ in the strong sense) whose properties and powers are nothing more than those of their constituent cells (smaller things), which are in turn (after a few more reductions) nothing more than fundamental particles. Like candle flames, but in ways that are much more complex and sophisticated, any biological system is an organized process system, which thermodynamically is *necessarily open* and in *essential* interactions with its environment. To say that the properties and powers of organisms are determined by the properties and powers of their constituent parts is therefore plainly untrue.²⁶⁷

This raises the question of individuality, however. For if living systems are not to be understood as individual things constituted by individual parts, how do we make sense of our experience of subjective experience? I will address this question in the following chapter, in a discussion of Dewey’s conceptions of mind, subjective mind, and inquiry

267. Campbell, *The Metaphysics of Emergence*, 154. Emphasis original.

Chapter Four – Inquiry, Mind, and Subjective Mind

Introduction: The Functional Nature of Mind and the Role of Somatic Experiencing in Inquiry

In this chapter, I discuss Dewey's conceptions of inquiry, mind, and subjective mind. I highlight the *functional* nature of these qualitative characteristics of experience, emphasizing the functional constitution of individuality in Dewey's emergent theories of mind and inquiry. This establishes the basis for presenting my conception of mindful inquiry in chapter five.

The chapter will include the following sections. First, I will describe the general pattern of inquiry continuous with the autopoietic operation of living systems, per Dewey's account in *Logic: The Theory of Inquiry*. Second, I will render Dewey's notion of mind as "the whole system of meanings as they are embodied in the workings of organic life" and as a "[structural]...field of...operative meanings" (LW1:230) of social systems, which is to say the organizational dynamics of society as an autopoietic unity. Third, I will discuss Dewey's claim that subjective mind is the "agency of novel reconstruction" of the functional organization of social situations as the field of mind. Understanding Dewey's meaning here requires explicating the functional nature of "individual parts" in living systems. Fourth, I will show how some sort of somatic practice is necessary for engaging the ineffable and qualitative nature of subjective mind and mind as such.

Dewey's Theory of Inquiry

Qualitative Inquiry v. Logical Theory

Dewey prefaces the development of his theory of inquiry with this reference to his postulate of continuity:

The application of the postulate of continuity to discussion of logical subject-matter means...that in order to account for the distinctive, and unique, characters of logical subject-matter we shall not suddenly evoke a new power or faculty like Reason or Pure Intuition.

...If one denies the supernatural, then one has the intellectual responsibility of indicating how the logical may be connected with the biological in a process of continuous development. This point deserves emphasis, for if the following discussion fails to fulfil the task of pointing out satisfactorily the continuous path, then that failure becomes, for those who accept the naturalistic postulate, but a challenge to perform the task better. (LW12:31-32)

While I will not claim to comprehensively improve Dewey's theory in what follows, I will endeavor to provide an original reading of the role in Deweyan inquiry of what I take to be the interrelated phenomena of the qualitative, subjective mind, and somatic experiencing. And this, I hope, will serve to advance the "naturalistic postulate" of the continuity of inquiry with the biological. Countless scholars have constructed treatises on Dewey's theories of inquiry, logic, and epistemology, but nearly all of them neglect the centrality of the qualitative²⁶⁸ and none has yet explicitly connected the qualitative with Dewey's notion of subjective mind and somatic experiencing.²⁶⁹ Gregory Pappas, for instance, recently notes that only two articles in the history of the journal *Transactions of the Charles S. Peirce Society* have addressed Dewey's "Qualitative Thought" article. This is significant given that, as I discuss below, the *qualitative* is arguably an essential and central concept in Dewey's mature thought.

In many cases, commentators over-emphasize the *logical* to a neglect of the more inclusive and expansive nature of *inquiry* in Dewey's metaphilosophical reconstruction of inquiry, where such reconstruction entails not just philosophical inquiry but all human inquiry, or

268. Pappas, "Dewey's Radical Logic," 438.

269. To be sure, a handful of scholars in recent years have addressed some one or two aspects of this picture. Richard Shusterman (2008), for instance, has spearheaded a portion of the pragmatic turn that highlights the somatic character of pragmatism; Phillip McReynolds (2017) has explored the autopoietic view of life in Dewey's thought; Mark Johnson (1992, 1998, 2006, 2007, 2010, 2014, 2017) has conducted extensive analysis of the embodied dimensions of Dewey's writing on mind and cognition; and Thomas Alexander (2002, 2013) has thoroughly developed the qualitative-aesthetic nature of Deweyan pragmatism. Nobody, however, has yet explicitly and inclusively detailed the interrelations and mutually constitutive meanings and functions of somatic/qualitative experience, subjective mind, and inquiry. What I present here is a start to this project; by no means do I pretend that this is an exhaustive and comprehensive account of these concepts and phenomena. If nothing else, I hope to show how a proper understanding of Dewey's theory of inquiry *must* take account of and integrate all of these elements, despite the complexity and difficulty of such an undertaking.

inquiry as such.²⁷⁰ In the appendix to *Knowing and the Known* (1949), featuring a letter written to Albert G. A. Balz in response to Balz's critique of the *Logic*, Dewey emphasizes that his primary interest was *inquiry* as an existential activity more than *logic* as a technical component of intellectual or philosophical procedure. He explains to Balz that he wanted to situate his thought in relation to the many logical theories that were developed in the 19th century. However, he did this not to show how his theory of inquiry *fit into* these logical theories, but how radically he was *departing from* them. Dewey explains:

As I look back I am led to the conclusion that the attempt conscientiously to do my full duty by these [19th century logical] treatises is accountable for a certain cloudiness which obscures clear vision of what the book [*Logic*] was trying to do. The force of the word "Logic," in all probability, has overshadowed for the reader the import of what in my intention was the significant expression, *The Theory of Inquiry*. For that source of misapprehension I accept full responsibility. (LW16:293; emphasis original)

Many Dewey scholars have been misled by the "cloudiness" that Dewey mentions here and have treated his *Logic* as just another logical theory to be compared to those of other philosophers writing in the traditional sense of constructing a self-contained theory of logical reasoning. For instance, in his critical and penetrating *Dewey's New Logic: A Reply to Russell*, Tom Burke speaks almost exclusively of "logic" and barely addresses the notion of inquiry.²⁷¹ While technically nuanced and thoroughly researched and thus commendable on their own terms, accounts such as Burke's do little to inform a discussion of the larger "vision of what the book

270. One of the major themes of Dewey's corpus is the critique of the separation of philosophy from science and the arts (e.g., LW1:8-9, 268; LW3:25-40). In the *Logic*, Dewey is concerned to enunciate the common pattern that obtains among *all* forms of inquiry, inclusive of common-sense and scientific inquiry (LW12:102-122). In other words, Dewey is not proposing a theory of logic as a philosophical project. He is seeking to integrate science, philosophy, and the arts into a unified theory-practice of inquiry to support the practical and intelligent direction of social change. In a similar vein, Peter Godfrey-Smith (2014) also suggests that it is best to approach Dewey's *Experience and Nature* as a metaphilosophical project rather than a collection of specific theses on particular and long-standing philosophical problems. Dewey's primary concern is to fundamentally re-think what philosophy is and how it is practiced.

271. Tom Burke, *Dewey's New Logic: A Reply to Russell* (Chicago: University of Chicago Press, 1994).

[*Logic*] was trying to do,” as Dewey declares.²⁷² This larger vision correlates to the metaphilosophical reconstruction of inquiry *qua* inquiry such that all specific forms of inquiry – common sense, philosophical, scientific – are understood to be continuous with (i.e. emergent from) the operations of living systems and thus share a common pattern despite differences in subject-matter (LW12:102-22).

In recent years, however, scholars have taken a renewed look at Deweyan inquiry based on an appreciation of the centrality of the *qualitative* in his pragmatism. Recalling Godfrey-Smith’s claim that “Dewey’s later thought [is] the high point of the pragmatist tradition so far,”²⁷³ it is of note that, as Pappas recently documents, “there was a shift of emphasis in [Dewey’s] work around the 1930’s. His writings at this time reveal a refreshed and more careful appreciation of the function of the qualitative in experience.”²⁷⁴ Pappas suggests that the qualitative characterization of inquiry (“reflective thought,” or thought generally [LW12:28]) is “the most radical aspect of Dewey.”²⁷⁵ Other scholars concur. Mark Johnson offers that “Dewey’s idea of a pervasive unifying quality is the key to his view of thinking, but it is perhaps the most problematic and neglected part of his theory.”²⁷⁶ Eugene Rochberg-Halton agrees that “qualitative immediacy is one of the essential—and one of the most overlooked—features of John Dewey’s theory of experience.”²⁷⁷ And, in a discussion of Dewey’s notion of a “situation”

272. Gregory Pappas likewise critiques interpretations of Dewey’s “logic” that treat it as a thesis on philosophical logic and neglect the larger (sociobiological, qualitative) context in which Dewey elaborated his idea of inquiry. Pappas, “John Dewey’s Radical Logic: The Function of the Qualitative in Thinking,” *Transactions of the Charles S. Peirce Society* 52, no. 3 (2016): 438.

273. Godfrey-Smith, *Complexity and the Function of Mind in Nature*, 6-7.

274. Pappas, “Dewey’s Radical Logic,” *Transactions of the Charles S. Peirce Society* 52, no. 3 (2016): 436-37.

275. Pappas, 441.

276. Mark Johnson, “Cognitive Science and Dewey’s Theory of Mind, Thought, and Language,” in *Cambridge Companion to Dewey*, edited by M. Cochran (Cambridge: Cambridge University Press, 2013), 132.

277. Eugene Rochberg-Halton, “Qualitative Immediacy and the Communicative Act,” *Qualitative Sociology* 5, no. 3 (Fall 1982), p. 162.

– which is inextricably tied to the qualitative – Matthew Brown states that “[Dewey’s] situationism, and the technical notion of a situation, is one of the most misunderstood and under analyzed elements of his theory of inquiry.”²⁷⁸

In this chapter I will show how the function of the qualitative in Deweyan inquiry can be better grasped by bringing together the qualitative, subjective mind, and somatic experiencing. This integration is supported by the process ontology and autopoietic view of life as detailed in chapters two and three. I suggest that the understanding made possible by integrating these notions through a process-autopoietic frameworks addresses what I take to be the primary dilemma in making sense of the qualitative in inquiry: namely that, as shown above and discussed further below, the qualities of immediate experience are in principle ineffable and therefore cannot be named, described, or conceptualized. Naturally, this presents a problem for mentalistic and linguaform theories of mind, cognition, and inquiry that assume thinking is primarily or exclusively “sentential, propositional, and conceptual in nature.”²⁷⁹ This is what Dewey critiqued as “intellectualism” (LW1:28) and the “mentalistic” conception of thinking and inquiry (LW12:42). The alternative, which presents immediately felt, had, or experienced *qualities* as the primary, ultimate, and ineradicable element of inquiry, requires some form of somatic exercise to support and guide analytic-reflective thought.

The sections below will detail the interconnections among mind, inquiry, the qualitative, subjective mind, and somatic experience. First, I will provide an overview of the general pattern of inquiry as Dewey develops it in the *Logic*. In this synopsis I will emphasize the continuity of inquiring activity with biological activity, as I believe this has been both neglected and

278. Matthew Brown, “John Dewey’s Logic of Science,” *HOPOS: The Journal of the International Society for the History of Philosophy of Science* 2, no. 2 (2012): 268.

279. Johnson, *Embodied Mind, Meaning, and Reason*, 6.

misunderstood in Deweyan scholarship. Then, drawing from this general outline of the process of inquiry, I will discuss Dewey's theory of emergent mind, his conception of subjective mind, and the necessity of somatic practice for engaging subjective mind as Dewey defines it.

The Pattern of Inquiry: Cycles of Integration and Disintegration

In *Logic: The Theory of Inquiry*, Dewey provides this definition of inquiry: "*Inquiry is the controlled or directed transformation of an indeterminate situation into one that is so determinate in its constituent distinctions and relations as to convert the elements of the original situation into a unified whole*" (LW12:108; emphasis original). The indeterminacy of a situation, importantly, is a *qualitative-existential* characteristic of the situation, and thereby can only be directly felt, sensed, or *had* in immediate experience. Indeed, the determinate, unifying quality of a situation is likewise a non-conceptual, existential quality. Dewey explains that the unique quality of each situation is what prompts and guides the process of inquiry:

[I]t is of the very nature of the indeterminate situation which evokes inquiry to be *questionable*; or, in terms of actuality instead of potentiality, to be uncertain, unsettled, disturbed. The peculiar quality of what pervades the given materials, constituting them a situation, is not just uncertainty at large; it is a unique doubtfulness which makes that situation to be just and only the situation it is. It is this unique quality that not only evokes the particular inquiry engaged in but that exercises control over its special procedures. (LW12:109)

In his discussion of the biological-existential matrix of inquiry, Dewey describes the autopoietic process of life in order to explain the basic pattern of inquiry. When functionally unified, a living system is "an integration" (LW12:32). In this condition, there is no distinction between "organism" and "environment;" there is just a functionally continuous "wholeness of operation" (LW3:27): "Integration is more fundamental than is the distinction designated by interaction of organism *and* environment. The latter is indicative of a partial disintegration of a prior

integration, but one which is of such a dynamic nature that it moves (as long as life continues) toward reintegration” (LW12:40; emphasis original).

Dewey’s reference to the “dynamic nature” of living transactivity can be read through the process ontological framework developed in chapter two. The crucial element is the fact that nearly all dynamic activity is non-linear (or, indeed, *all* dynamic activity, when the non-reducible, holistic functioning of a continuous process reality is considered). The conjunction of non-linear and metabolic activity in living systems inherently generates entropy. When the functional, tensional ratio between a system’s entropy and negentropy becomes imbalanced such that the coherence and maintenance of the system’s holistic organization is potentially threatened, it can be said to be “disintegrated.” As Dewey puts it, “the biological antecedent conditions of an unsettled situation are [a] state of imbalance in organic-environmental interactions” (LW12:110). The dynamic nature of autopoietic organization includes intrinsic mechanisms for re-creating a state of integration, however; namely, negative feedback loops within the system’s non-linear transactivity function to rebalance the system’s ratio of entropy to negentropy, thereby restoring a functional, precariously-stabilized condition of far-from-thermodynamic-equilibrium.²⁸⁰

This, I suggest, is the “definite pattern” of the “structure and course of life-behavior [which] foreshadows the general pattern of inquiry” (LW12:40). As Dewey explains,

For inquiry grows out of an earlier state of settled adjustment, which, because of disturbance, is indeterminate or problematic (corresponding to the first phase of tensional activity), and then passes into inquiry proper, (corresponding to the searching and exploring activities of an organism); when the search is successful, belief or assertion is the counterpart, upon this level, of reintegration upon the organic level. (LW12:40)

280. Campbell, *The Metaphysics of Emergence*, 135-39.

Dewey summarizes that “living may be regarded as a continual rhythm of disequilibrations and recoveries of equilibrium” (LW12:34). He uses the example of hunger as a “manifestation of a state of imbalance between organic and environmental factors in that integration which is life” (LW12:34) to describe the biological-existential functions operative in the process of inquiry. The state of imbalance experienced as a quality of hunger constitutes *need*. To satisfy this need, an organism must make some actual change in environing conditions. When those changes function to resolve the state of imbalance by creating a new functional integration according to the organizational dynamics of the autopoietic system, the “reciprocal adaptation that is required for the maintenance of life-functions” is restored (LW12:66).

This process of responding to needs as qualities of existential-situational conditions by modifying those conditions through active experimentation is the process of inquiry. While the cultural matrix of human activity adds degrees of complexity to the intellectual qualities of inquiry (especially having to do with symbolic-conceptual communication; see, e.g., LW12:48-65), which are “foreshadowed in behavior of the biological kind” (LW12:49), the basic pattern of inquiry remains continuous with biological functions (LW12:49-50).²⁸¹ The point I want to stress here is what Dewey concludes by understanding inquiry as continuous with and emergent from biological function: “There is no inquiry that does not involve the making of *some* change in environing conditions” (LW12:41).

281. As Dewey says, “Upon the biological level, organisms have to respond to conditions about them in ways that modify those conditions and the relations of organisms to them so as to restore the reciprocal adaptation that is required for the maintenance of life-functions. Human organisms are involved in the same sort of predicament” (LW12:66).

Dewey's Theory of Mind: "A Moving Stream, A Constant Change"

Mind and Social Systems as Autopoietic Organizations

In Dewey's process pragmatism, "mind and matter are not underlying and ultimate substances" (LW1:5) or "static structures," they are "[functional] characters of natural events" (LW1:66). As discussed in chapter two, nature is unified as a continuous series of organizations of energies-processes wherein no level of this series has ontological or causal priority. Given this, just as living systems are distinguished within this continuity by their unique organizational form – i.e., an organization of energies persisting self-recursively in a state of far-from-thermodynamic equilibrium – which simultaneously enables and manifests the emergent function of self-maintaining self-production (i.e. autopoiesis), "so 'mind' is an added property [functional quality]²⁸² assumed by a feeling creature, when it reaches that organized interaction with other living creatures which is language, communication" (LW1:198).

I propose to read Dewey's account of mind and subjective mind through the process ontological and autopoietic view of life presented in chapters two and three. This enables the modeling of mind as an autopoietically-organized system that emerges from the communicative transactivity of its functional components, which modern philosophy identifies as individual subjects or selves. Defined through an emergent process autopoietics, however, what are typically thought to be substantial ontological subjects with minds are instead understood as transactive emergent functions whose activity as components of social mind simultaneously constitutes them as functional processes *and* autopoietic unities in their own right. In other words, for Dewey, subjects are "centers of experience" (LW1:22) or "particularized centers of

282. I qualify Dewey's use of "property" here to distinguish his meaning from common analytic metaphysical meanings of "property" as referring to the synchronic, material constitution definition of particular entities. See, e.g., Kirchhoff, "Extended Cognition and the Causal-Constitutive Fallacy," 320-60.

initiation and energy” (LW1:168). This undergirds his development of subjective mind, or “mind in its individual aspect, [as] the method of change and progress in the significances and values attached to things” (LW1:7).

Autopoietic organization is often discussed in reference to the simplest instances of such organization: cells. As autopoietic unities such as cells and organisms come to be structurally coupled,²⁸³ their functioning as autopoietic unities becomes mutually recurrent such that the transactive operations of each “individual” unity (see below) manifest dynamics that constitute a newly-emergent, “higher order” autopoietic system.²⁸⁴ As this process extends to include more complex systems in more complex structural couplings and organizations, “third-order” structural couplings emerge, which constitute social phenomena.

While there is still debate about whether social organizations such as societies are properly regarded as autopoietic systems,²⁸⁵ I suggest that this is at least plausible, if not a necessary extension of the concept. This is because, as discussed above, the entire Earth can be regarded as a FFE, recursively self-maintenant process system, which is to say an autopoietic system. And, as Boisvert suggests, for Dewey “the entire universe, in fact, ‘is an organism.’”²⁸⁶ As Dewey himself says, Leibniz’s “great glory as a philosopher [was his view of] the universe as a unity of inter-related members – as an organic unity, not a mere self-identical oneness...a unity of activity, a dynamic process” (EW1:415). Moreover, this seems to me to be necessary given

283. Though he does not use the term “structural coupling” (this is Maturana and Varela’s term), Dewey effectively elaborated this phenomenon in *Experience and Nature* in his discussion of communicative transactivity as a “concretion” of “organic psycho-physical actions...in discourse” (LW1:135), as a “mode of social action” (LW1:145). Chapters 5-8 in *Experience and Nature* detail the emergent, autopoietically-organized, structurally-coupled nature of living systems, including social organizations, though of course in Dewey’s idiosyncratic language. (Cf. Maturana and Varela, *The Tree of Knowledge* (1992), 193-212.) Thus, it is easy to overlook what Dewey is doing here.

284. John Mingers, *Self-Producing Systems: Implications and Applications of Autopoiesis* (New York: Springer, 1995), 41-45.

285. Mingers, 43.

286. Boisvert, *Dewey’s Metaphysics*, 36.

Dewey's postulate of continuity, which applies to all of reality and which is a core principle of process metaphysics. As Nicholson and Dupré explain, no level of the hierarchy of continuous process organization that constitutes nature is "ontologically or causally primary."²⁸⁷ I do not see how social transactivity could be fully continuous with "lower level" biological activity and yet not manifest autopoietic organization, given that, as established in chapter two, autopoietic organization defines biological activity as such. At a minimum, I believe it is plausible that (at least some) social organizations function as emergent, self-organizing systems, and modeling them as such helps explain Dewey's theory of emergent mind, subjective mind, and inquiry.

Mind as Emergent Function of Social Transactivity

Dewey explains how mind as a functional character of natural events emerges from the interactivity of other natural events, namely living organisms.²⁸⁸ Concordant with recently-developed process metaphysical taxonomies such as Richard Campbell's,²⁸⁹ Dewey delineates levels of the continuous whole of nature according to functional capacities emergent from increasing levels of complexity of fields of transactivity (LW1:208). He specifies three distinct levels: the physical/inanimate; the psycho-physical, and the mental/mindful. On the physical level, energies are organized indifferently. Inanimate objects have no preference, *per se*, to persist in the form that defines them as a given object:

Iron as such exhibits characteristics of bias or selective reactions, but it shows no bias in favor of remaining simple iron; it had just as soon, so to speak, become iron-oxide. It shows no tendency in its interaction with water to modify the interaction so that consequences will perpetuate the characteristics of pure iron. (LW1:195)

287. Dupré and Nicholson, "A Manifesto for a Processual Philosophy of Biology," 27.

288. Dewey explicitly describes persons as events continuous with all other events or organizations of energy that constitute the complex of nature: "Experience, a serial course of affairs with their own characteristic properties and relationships, occurs, happens, and is what it is. Among and within these occurrences, not outside of them nor underlying them, are those events which are denominated selves" (LW1:179).

289. Campbell, *The Metaphysics of Process*, 135-160. See also Richard Campbell, "A Process-Based Model for an Interactive Ontology," *Synthese* 166, no. 3 (2009): 453-77.

If an organization of energies *does* manifest tendency to maintain itself, Dewey continues, “it would have the marks of a living body, and would be called an organism” (LW1:195). In the next sentence, Dewey articulates the idea that a part of an autopoietic organization is defined/constituted by its serving a function of sustaining the autopoietic dynamics of the whole: “Iron as a genuine constituent of an *organized* body acts so as to tend to maintain the type of activity of the organism to which it belongs” (LW1:195; emphasis original).

The “psycho-physical” emerges when organizations of energy function to sustain themselves through a particular mode of reconstructive interaction with their environments:

If we identify, as common speech does, the physical as such with the inanimate we need another word to denote the activity of organisms as such. Psycho-physical is an appropriate term. Thus employed, ‘psycho-physical’ denotes the conjunctive presence in activity of need-demand-satisfaction, in the sense in which these terms have been defined. In the compound word, the prefix ‘psycho’ denotes that physical activity has acquired additional properties, those of ability to procure a peculiar kind of interactive support of needs from surrounding media. (LW1:195-96)

Here Dewey is describing the general contours of autopoietic organization; that is, the “psycho-physical” is his term for life, or “organisms as such.” As explained in chapter three, the organizational dynamics of the living system are a holistic feature of the autopoietic unity and constitute, specify, and define the sorts of activities necessary for its maintenance; this is what constitutes proper parts, or “genuine constituents,” of the system. This peculiar, emergent organization of living systems enables the functional qualities of *sensitivity* and *feeling*, which of course are lacking in inanimate systems. Dewey explains:

Whenever the activities of the constituent parts of an organized pattern of activity are of such a nature as to conduce to the perpetuation of the patterned activity, there exists the basis of sensitivity. Each ‘part’ of an organism is itself organized, and so of the ‘parts’ of the part. Hence its selective bias in interactions with environing things is exercised so as to maintain *itself*, while also maintaining the whole of which it is a member. ... This pervasive operative presence of the whole in the part and of the part in the whole constitutes susceptibility—the capacity of feeling—.... Responses are not merely

selective, but are discriminatory, in behalf of some results rather than others. This discrimination is the essence of sensitivity. (LW1:196-97; emphasis original)

Sensitivity in complex, mobile organisms such as non-human animals and human animals manifests as *feeling*, but merely *having* such feeling does not yield mental function, according to Dewey. At first, such feeling qualities in organisms are “realized...only as vague massive uneasiness, comfort, vigor and exhaustion” (LW1:197). What converts the vague, ineffable quality of feeling into mindful activity is the *use* of such feelings as shared/collective/objective means in sustaining the autopoietic organization of a group of organisms via communicative interactivity:

Complex and active animals *have*, therefore, feelings which vary abundantly in quality, corresponding to distinctive directions and phases—initiating, mediating, fulfilling or frustrating—of activities, bound up in distinctive connections with environmental affairs. They *have* them, but they do not know they have them. Activity is psycho-physical, but not ‘mental,’ that is, not aware of meanings. As life is a character of events in a peculiar condition of organization, and ‘feeling’ is a quality of life-forms marked by complexly mobile and discriminating responses, so ‘mind’ is an added property assumed by a feeling creature, when it reaches that organized interaction with other living creatures which is language, communication. Then the qualities of feeling become significant of objective differences in external things and of episodes past and to come. This state of things in which qualitatively different feelings are not just had but are significant of objective differences, is mind. Feelings are no longer just felt. They have and they make *sense*; record and prophesy. That is to say, differences in qualities (feelings) of acts when employed as indications of acts performed and to be performed and as signs of their consequences, *mean* something. (LW1:198; emphasis original)

Linguistic activity makes use of the ineffable qualities of immediate experience by *naming* some aspect of a situational quality that, because it is regular, can be used to support the reconstruction of the situation from an indeterminate to a more determinate quality. The act of naming, describing, denoting – any symbolic-conceptual activity – *discriminates* within the pervasive quality that unifies a situation *as* a whole situation. And what is discriminated are the regular, recurrent, predictable qualities of the activities constituting the situation (LW1:6, 117; LW12:74,

226, 248-50). By isolating these qualities of activity and naming them, they can be used as shared means in the reconstruction of the situation.

It is difficult to directly and specifically define “mind” as Dewey develops the concept. He uses various phrases to describe the qualitative, transactive functional character of events he refers to by *mind*: “mind is...a function of social interactions, and...a genuine character of natural events...the social character of meanings forms the solid content of mind” (LW1:6-7); “mind...is the center of the processes of experiencing” (LW1:30-31); mind “is a property of a particular field of interacting events” (LW1:201); “mind emerges” from the communicative transactivity of social organizations as “concretion[s]” of “organic psycho-physical actions” (LW1:135); and “mind denotes the whole system of meanings as they are embodied in the workings of organic life” (LW1:230).

Ultimately, mind as a “field...is only implicit in any conscious act or state...mind is contextual and persistent...a constant background and foreground...a constant luminosity” (LW1:230) cannot be directly named or described but it can be *felt* or *had* in its qualitative, functional immediacy. Consider the following characterization of mind as a functional process:

If mind is a further process in life, a further process of registration, conservation and use of what is conserved, then it must have the traits it does empirically have: being a moving stream, a constant change which nevertheless has axis and direction, linkages, associations as well as initiations, hesitations and conclusions. (LW1:215)

The analogy to a stream or river is pertinent. What constitutes a river is that it *flows*, which is to say that a river *is the flowing* of water. Therefore, trying to define “the river” by delineating the properties of some portion of the river water removed from the flow in a bucket will necessarily, in principle, not properly identify the river *as such*, which *is the activity of flowing*. In analogous terms, trying to define *mind* – which is also, per Dewey’s definition, a moving stream, i.e. an

active flowing²⁹⁰ – according to the properties of a synchronic snapshot of some isolated component of that flowing-streaming-continuously changing process will necessarily, in principle, not properly identify mind *in its flowing change*. This is why Dewey says that the attempt to solve the mind-body problem by identifying the neural correlates of consciousness (which are the cognitive-mental analog to a bucket of water in the study of a river) actually *exacerbates* the problem:

As far as it is assumed that modes of consciousness are in themselves already differentiated into sensory, perceptual, conceptual, imaginative, retentive, emotional, conative [buckets of mentation, so to speak]...physiological study will consist simply of search for the different bodily and neural processes that underlie these differences. The outcome is an exacerbation of the traditional mind-body problem. (LW1:256-57)

Insofar as mind is defined as a functional character of social organizations, so “subjective mind” must also be defined functionally. The following section elaborates Dewey’s conception of subjective mind according to the process-autopoietic framework developed above.

Subjective Mind as *Transactive* Reconstructive Function of Social Mind as Autopoietic System

In this section, I explain Dewey’s claim that subjective mind is not an “independent creative force...it is an agency of novel reconstruction of a pre-existing order” (LW1:168). The key to understanding this is the emergent and continuous ontology of autopoietic systems, which is defined by the functional and mutually constitutive nature of both the *parts* and the emergent (i.e., non-linear, spontaneously-generated, self-organized) holistic *organization* of such systems. In the first subsection below, I detail the *seemingly* dualistic nature of autopoietic organizations

290. Dewey explains that a shift to his process ontological pragmatism would ideally entail a shift in speaking in terms of nouns to verbs: “if there were an interdict placed for a generation upon the use of mind, matter, consciousness as nouns, and we were obliged to employ adjectives and adverbs, conscious and consciously, mental and mentally, material and physically, we should find many of our problems much simplified” (LW1:66). This is because every “thing” is technically a dynamic, temporal function or portion of transactivity. Nothing, in Dewey’s ontology, is completely static. What appears static or unchanging merely appears so given its comparatively slow rate of change (LW1:63).

as necessarily open far-from-thermodynamic equilibrium process systems: while such systems are physically defined by a spatial boundary and thus seem separate – i.e. ontologically independent – from the larger autopoietic unity that actually specifies their functional role in and belonging to that larger system, that spatial boundary itself is functionally constituted and maintained by processes that are physically-spatially external to the system but logically-functionally constitutive of its being. In other words, what we as observers abstract as an autopoietic unity exists simultaneously as a spatially bounded, self-organized whole in its own right *and* as a component function of a higher order autopoietic system. The processes that constitute and maintain the spatial boundary of an autopoietic unity on any given level are *transactive* processes, meaning that they “belong” as much to the autopoietic system they constitute as a unity as to the higher order autopoietic system whose organizational dynamics constitute that lower-level unity as a functional component of the higher order system. In still other words, the self-maintenant metabolic-cognitive activity of any given autopoietic unity simultaneously serves to maintain that unity *and* to serve a function necessary for the maintenance of a higher-order autopoietic unity. It is only in the realm of observation and abstraction that such unities exist separately from one another, the way that we commonsensically perceive individual humans in a social group. In the emergent functioning of an autopoietically-organized social group, however, what we abstract as individuals – i.e. parts – are actually temporal, qualitative, transactive functions of the group as a whole.²⁹¹

This yields an understanding of subjective mind as a *transactive* functional quality of social mind understood as a self-organizing autopoietic system. That is, subjective mind is not a

291. Maturana and Varela’s *Autopoiesis and Cognition*, I believe, remains the most consistent and systematic explication of this phenomenon. Their account, though technical and dependent on neologisms, is methodologically, conceptually and logically rigorous, in contrast to Dewey’s more informal and folk-terminological account.

property, power, or faculty contained within and produced by antecedently existing, independent ontological subjects – i.e., an “independent creative force” – it is the contingent, variable, precarious quality of the transactivity of social mind when the dynamic – i.e. non-linear, spontaneous (LW1:97) – functioning of that activity increases the entropy of a system to a point where the resultant disorder of the system disrupts the functional integrity of the system, prompting the system to reorganize itself to accommodate the increase in entropy manifest as the disordered activity of its constituent parts. When the functional integrity of the system is disrupted, what we abstract as parts of the system – i.e., individual organisms – emerge as “eventual functions” that serve to re-organize the interrelations among those parts such that the functionally-integrated *form* (i.e. dynamic organization; LW10:20) of those relations is renewed and the integrity of the system is restored. Then, in the following subsection, I will explain how and why engaging and facilitating these processes in social inquiry requires some form of somatic experiencing.

The Functional Definition of “Parts” of Autopoietic Systems: Spatial Externality and Logical/Functional Internality

As mentioned in the first section of this chapter, inquiry aims at reconstructing an existential situation from a state of disintegration to a condition of functionally integrated organizational unity. And as discussed throughout chapters two and three, in Dewey’s process pragmatism living systems are unified, emergent process systems. When functionally integrated, a living system exists *as* a unity; there is, technically, no “organism” and “environment.” The distinction “organism-environment,” as Dewey says, “is indicative of a partial disintegration of a prior integration, but one which is of such a dynamic nature that it moves (as long as life continues) toward reintegration” (LW12:40). *How* it returns to an integrated state is through the

activity of subjective mind as an agency of novel reconstruction of a situation. By subjective mind being an “agency of reconstruction” Dewey is referencing the emergent, functional definition of component parts of dynamically organized autopoietic systems, which have a sort of “double status and import:”

Thus an individual existence has a double status and import. There is the individual that belongs in a continuous system of connected events which reinforce its activities and which form a world in which it is at home, consistently at one with its own preferences, satisfying its requirements. Such an individual is in its world as a member, extending as far as the moving equilibrium of which it is a part lends support. It is a natural end, not as an abrupt and immediate termination but as a fulfillment. Then there is the individual that finds a gap between its distinctive bias and the operations of the things through which alone its need can be satisfied; it is broken off, discrete, because it is at odds with its surroundings. It either surrenders, conforms, and for the sake of peace becomes a parasitical subordinate, indulges in egotistical solitude; or its activities set out to remake conditions in accord with desire. In the latter process, intelligence is born—not mind which appropriates and enjoys the whole of which it is a part, but mind as individualized, initiating, adventuring, experimenting, dissolving. (LW1:188)

This “double status and import” of individualized parts of a system is explained by the continuity exhibited through the phenomenon of spatially external processes being functionally-logically constitutive of living systems. Understanding the nature of individual existences as emergent functions within a field of transactivity avoids the dualizing, hypostatizing tendency of “extreme modern subjectivism” (LW1:168-69) which ultimately derives from Parmenides’ reification of Being and the resultant duality between *thing* and *activity* characteristic of substance metaphysical paradigms.²⁹²

What Dewey calls the “psycho-physical” is life itself or “organisms as such,” and thus I am equating this level of organization with autopoietic organization and what Campbell

292. Dewey explains that while the mind-matter, mental-physical dualism is often attributed to Descartes, Descartes’s formulation was just the modern manifestation of the “primary metaphysical dualism” (LW1:102) at the root of classical Greek philosophy (LW1:177-78). Campbell (2015) provides a very similar – and much more detailed and nuanced – historical analysis of mind-matter dualism.

identifies as “recursively self-maintenant” systems.²⁹³ The qualifier *recursively* self-maintenant indicates a distinction between types of self-maintenant systems that Dewey’s analysis neglects. Candle flames, for instance, can be understood as self-maintenant systems, as they “contribute to the persistence of the conditions upon which their own persistence depends.”²⁹⁴ Insofar as all boundary conditions are satisfied, a candle flame’s vaporizing the candle’s wax induces convection currents that bring oxygen to the flame while simultaneously expelling carbon dioxide created in the combustion process. Two key phenomena follow from this example of a basic self-maintenant system. As Campbell explains, “the ability of a complex system to do this [to contribute to its own persistence by modifying/maintaining its relations with its surroundings by changing environmental conditions] is a holistic property of the system itself.”²⁹⁵ However, such holistic properties are not to be understood as *contained within* a spatially-bounded thing or entity. As mentioned above, substance metaphysics typically identifies things according to their internal properties. Process metaphysics, however, includes spatially external events/activities in the *functional* identity of far-from-thermodynamic, autopoietic systems:

we cannot say what a candle flame *is* without mentioning its *relations* with *external* elements in its ambient situation. The very being of the flame, therefore, is a function (in part) of these external relations. These *physically external* relations are *logically internal* to any flame.²⁹⁶ ...they are constitutive of its being.²⁹⁷

This is a crucial element of understanding the functional identity of component parts of emergent, autopoietic process systems, and this was not lost on Dewey:

Every ‘mind’ that we are empirically acquainted with is found in connection with some organized body. Every such body exists in a natural medium to which it sustains some adaptive connection ...*At every point and stage, accordingly, a living organism and its life processes involve a world or nature temporally and spatially ‘external’ to itself but*

293. Campbell, *The Metaphysics of Emergence*, 152-59.

294. Campbell, 150.

295. Campbell, *The Metaphysics of Emergence*, 150.

296. Campbell, 150-51. Emphasis original.

297. Campbell, 202.

'internal' to its functions. The only excuse for reciting such commonplaces is that traditional theories have separated life from nature, mind from organic life, and thereby created mysteries. Restore the connection, and the problem of how a mind can know an external world or even know that there is such a thing, is like the problem of how an animal eats things external to itself. (LW1:213)

This spatial externality and functional internality of living processes helps elucidate the peculiar and emergent ontology of autopoietic systems and undergirds Dewey's notion of subjective mind as the reconstructive agency of social mind. For Dewey, subjective mind does not primarily belong to or emerge from a spatially "distinct existence" (LW1:171). It is not a property, power, or faculty of self-sufficing individuals (LW1:134). "Mind that appears *in* individuals is not as such individual mind" (LW1:170). Rather, it is a functional quality of social mind as an integrated system, unified by its holistic, autopoietic organization.

The "double status and import" of individuals refers to the fact that in the ontologically continuous complex of events that constitutes nature, the individuality of an autopoietic system as an integrated unity is constituted precisely in, as, and through that system's acting as a functional process within a higher-order autopoietic system. As Dewey says, "each 'part' of an organism is itself organized, and so of the 'parts' of the part. Hence its selective bias in interactions with environing things is exercised so as to maintain itself, while also maintaining the whole of which it is a member" (LW1:196). In autopoietic organizations, there is a "pervasive operative presence of the whole in the part and of the part in the whole" (LW1:197).

In other words, I understand Dewey's postulate of *continuity* to refer to the seemingly paradoxical fact that any given autopoietic unity's self-maintenant activity simultaneously and necessarily serves the function of maintaining the holistic organizational dynamics of the larger whole (higher-order autopoietic system) that constitutes and incorporates that system as a functional component within the transactivity of the larger whole. I say "seemingly" paradoxical

because when the functionally emergent nature – mutually-constitutive nature of parts and wholes – of living systems is understood, it is perfectly consistent that the “self”-maintenant activity of an autopoietic system is wholly coincident with that system’s serving a functional role in maintaining the holistic organizational dynamics of the larger system that defines it as a genuine constituent of that larger system.

As noted above, what defines an event, process, or activity *as* a “genuine constituent of an organized body [i.e. autopoietic system]” is that it functions to “maintain the type of activity of the organism to which it belongs” (LW1:195). Functioning to maintain the organizational dynamics of the organism to which a part belongs *simultaneously* serves to maintain that part’s own organization, because autopoietic systems are defined by their persisting in a state of far-from-thermodynamic equilibrium. The stability of FFE systems is made possible by a constant and measured flow of energy inputs and outputs that balances entropic and negentropic activity that maintains a system’s homeodynamics²⁹⁸ in relation to the FFE conditions of its envioning medium. The processes involved in an organism’s sustaining of this “adaptive connection” to its environment is *metabolism*. The metabolic activity of living systems incorporates processes physically external to, but logically-functionally constitutive of, its being.

As Maturana and Varela explain, in autopoietic organization, the dynamics (metabolism) of a system create the components (e.g., molecular structures within a cell) necessary for creating a boundary (e.g., cell membrane) which makes possible the dynamics that function to create the boundary. Though reflective analysis abstracts different aspects of this process – “dynamics,” “boundary,” “components” – in itself there is just one continuous, integrated process. This, I take

298. I say “homeodynamics” rather than “homeostasis” because the former term is suitable for a process ontological framework whereas the latter term – emphasizing *stasis* – belongs within and correlates to a substance ontological paradigm. See, e.g., David Lloyd, Miguel A. Aon, and Sonia Cortassa, “Why Homeodynamics, Not Homeostasis?,” *The Scientific World Journal* 1 (2001): 133–45, <https://doi.org/10.1100/tsw.2001.20>.

it, is what Dewey means by saying that human life *just is* “an integration” (LW12:32), a “unified wholeness of operation” (LW3:27). Maturana and Varela explain that “these are not sequential processes, but two different aspects of a unitary phenomenon. It is not that first there is a boundary, then a dynamics, then a boundary, and so forth. We are describing a type of phenomenon in which the possibility of distinguishing one thing from a whole depends on the integrity of the processes that make it possible.”²⁹⁹

However, this self-producing process can be misinterpreted as purely a function of the spatially internal, physically contained properties of the autopoietic system. Process metaphysics and dynamic systems theory specifies that in order for systems to remain stable in a state of far-from-thermodynamic equilibrium, they must be “*necessarily open* and in *essential* interactions with its environment.”³⁰⁰ Where Campbell here uses the term *interactions* to refer to metabolic activity, Dewey’s term *transaction* is preferable. In specifying that the metabolic processes of living systems are characteristically *transactional*, Dewey is indicating this conjunction of spatial externality and functional “internality.” He explains that “living as an empirical affair is not something which goes on below the skin-surface of an organism: it is always an inclusive affair involving connection, interaction of what is within the organic body and what lies outside in space and time, and with higher organisms far outside” (LW1:215). Given the necessary metabolic character, needs, and functions of living systems as open, FFE process systems, “at every point and stage...a living organism and its life processes involve a world or nature temporally and spatially ‘external’ to itself but ‘internal’ to its functions” (LW1:212). In short, “the processes of living are enacted by the environment as truly as by the organism; for they *are* an integration” (LW12:32; emphasis original).

299. Maturana and Varela, *The Tree of Knowledge*, 46.

300. Campbell, *The Metaphysics of Emergence*, 154. Emphasis original.

The “individuality” of an organism refers to the physical/spatial boundary created by its autopoietic activity. This very boundedness, though, is a product or function of the *transactivity* of the larger system that sustains the metabolic functions of the system’s component – i.e. “individual” – parts. The holistic dynamics of the larger autopoietic system define and organize the activity of its parts in such a way as to maintain those holistic dynamics precisely by sustaining the conditions necessary for its parts – as organized systems in their own right – to maintain their own organization. In turn, the parts maintain their own organization *in the very process* of functioning as genuine constituents of the larger system, which is to say in their acting in such a way as to maintain the organization of the larger whole that constitutes them in and as this transacting. This is the circularity of emergent, autopoietic systems as mentioned in chapter three, and this is the dynamic Dewey describes when he says “each ‘part’ of an organism is itself organized, and so of the ‘parts’ of the part. Hence its selective bias in interactions with environing things is exercised so as to maintain itself, while also maintaining the whole of which it is a member” (LW1:196). This accords with contemporary definitions of ontological *emergence*, such as that provided by Campbell: “*an entity or process system is ontologically emergent if and only if it exists in the same time and place as its parts and has distinctive properties and modes of interaction which are necessarily dependent upon the mode of organization of its parts.*”³⁰¹

This functionally emergent nature of living systems thereby explains the ontological import of Dewey’s postulate of *continuity* and his defining of mind as “a moving stream, a constant change which nevertheless has axis and direction, linkages, associations as well as initiations, hesitations and conclusions” (LW1:215). I submit that we can understand these

301. Campbell, *The Metaphysics of Emergence*, 208. Emphasis original.

“linkages, associations...initiations, hesitations and conclusions” as referencing the individuality of autopoietic unities as transactionally-constituted yet spatially distinct events, wholly continuous with the complex of events that constitutes nature. As Campbell puts it, “it is not just that open systems [recursively self-maintenant far-from-thermodynamic equilibrium process systems – i.e. autopoietic unities –] are *dependent* on interactions with their environments, they are *constituted* by, realized in, those external interactive processes. They are constituted as twists or knots in the topologies of process flow, not in the mereological bases of particles or other particulars.”³⁰²

What Campbell here describes as “twists or knots in the topologies of process flow” are what the substance metaphysical paradigm identifies as objects, entities, individuals, or selves, definable by their synchronic, materially-based constitution.³⁰³ This definition of individual existences is anathema to the emergent ontology of living systems in a process metaphysics.

Campbell summarizes:

These considerations entail a metaphysic radically different from those which standardly accord priority to entities. Biological systems – including human bodies – are *not* to be understood simply as substantial entities (‘things’ in the strong sense) whose properties and powers are nothing more than those of their constituent cells (smaller things), which are in turn (after a few more reductions) nothing more than fundamental particles. Like candle flames, but in ways that are much more complex and sophisticated, any biological system is an organized process system, which thermodynamically is *necessarily open* and in *essential* interactions with its environment. To say that the properties and powers of organisms are determined by the properties and powers of their constituent parts is therefore plainly untrue. Rather...organisms are able to maintain their own viability conditions...through internally regulating their inter-connected cyclical interactions, both external and internal. ...The metaphysical consequence is that we cannot say what they *are* without taking those interactions into account.³⁰⁴

302. Campbell, 202. Emphasis original.

303. Kirchoff, “Extended Cognition and the Causal-Constitutive Fallacy,” 320-60.

304. Campbell, *The Metaphysics of Emergence*, 154. Emphasis original.

In other words, in an emergent process ontology, what something *is* is a question of what Dewey calls “eventual function” and only definable or identifiable relative to the consequences following from the activity of an organization of energies in relation to that organization’s surroundings.³⁰⁵ Dewey’s way of describing this is as follows: “Personality, selfhood, subjectivity are eventual functions that emerge with complexly organized interactions, organic and social” (LW1:162). It is important to emphasize that selves or subjects in no way exist separate from or prior to the continuous, interwoven fields of transactivity that constitute nature; all that exists is a “complex of events” (LW1:66): “Experience, a serial course of affairs with their own characteristic properties and relationships, occurs, happens, and is what it is. *Among and within these occurrences*, not outside of them nor underlying them, are those events which are denominated selves” (LW1:179; emphasis added). Human persons are likewise natural events, or organizations of energy, wholly continuous with all other organizations of energy that constitute the “things” of nature: humans are “a mode of energy inseparably connected with other modes [of energy]” within nature (LW1:324).

Further, I believe this framework of ontological continuity explains some of Dewey’s more esoteric metaphysical claims. For instance, he writes that “in every event there is something obdurate, self-sufficient, wholly immediate, neither a relation nor an element in a relational whole, but terminal and exclusive” (LW1:74) and that “nature is an affair *of* affairs, wherein each one, no matter how linked up it may be with others, has its *own* quality” (LW1:83; emphasis original). As noted above, what we call subjects, selves, or individual persons are in

305. This is an instance where terminology is crucial for properly denoting the autopoietic view of life. There are subtle but crucial and often overlooked differences among seemingly synonymous terms such as “environment,” “ecological niche,” “surroundings,” and “world.” There is as yet no perfectly consistent usage among these terms in the literature, which contributes to the misunderstanding of the autopoietic view of mind. What must be stressed is that on the process ontological-autopoietic view, “organism” and “environment” are mutually constituted; neither can be defined independent of the other, and indeed neither has existence independent of the other (e.g., Maturana and Varela, *Autopoiesis and Cognition* (1980), xxiii).

Dewey's continuous process ontology *events* occurring within the complex of events that constitutes nature. The "obdurate, self-sufficient, wholly immediate" quality of such activities *as individuated events*, I contend, refers to the organizational dynamics of autopoietic systems *as unities*, manifest as the physical/spatial boundaries that constitute what we perceive as discrete objects and individual persons. Understanding the emergent, functionally-constituted nature of such systems, where the individuality of such systems is constituted precisely by, as, and through its function as a part of a larger system, is what prevents what Dewey calls *the philosophic fallacy*: converting an eventual function into an antecedent existence (LW1:34). This is also the common fallacy in logical theory: "The conversion of a function in inquiry into an independent structure" (LW12:151). The following section shows how for Dewey, "subjective mind" is to be understood as one such "eventual function" occurring within the "serial course of affairs" that is experience and nature.

Subjective Mind's Eventual Function: Agency of Reconstruction

Dewey's definition of subjective mind³⁰⁶ as an "agency of novel reconstruction" can now finally be explicated in full. This section will elucidate Dewey's assertion that "the mind that appears *in* individuals is not as such individual mind" (LW1:170; emphasis original). First, I will survey Dewey's distinguishing of subjective mind from the modern notion of subjects with minds. Second, I will show how to understand subjective mind as a functional quality of the transactivity of mind as "social organization" (LW1:169) according to the principles of emergent systems as detailed above. Third and finally, I will explain how engaging subjective mind in this function requires some sort of somatic exercise. This will establish my notion of *mindful inquiry*

306. Dewey also refers to subjective mind as "mind in its individual aspect" (LW1:7); "mind in an individualized mode" (LW1:164); "mind as individual" (LW1:175); and "'consciousness' as bare event" (LW1:171).

as an ongoing process of social-existential change, where this process is continuous with the nature of living systems as such.

Subjective Mind, Not Individuals With Minds

Chapter six in *Experience and Nature*, “Nature, Mind and the Subject,” situates Dewey’s understanding of subjective mind in relation to classic and modern conceptions of the individual subject. In the classic paradigm, according to Dewey, individual existences were “particulars, transient, partial, and imperfect specimens of the true individual. Mankind as species is more truly an individual than was this or that man” (LW1:162). The modern paradigm essentially reversed this definition of the individual, positing instead that “an individual is no longer just a particular, a part without meaning save in an inclusive whole, but is a subject, self, a distinctive centre of desire, thinking and aspiration” (LW1:168). The modern subject is “a bodily or a psychic self *with* a mind” (LW1:170) where mind is “a formal capacity of apprehension, devising and belief” (LW1:169). In Dewey’s process pragmatism, however, neither of these conceptions of the individual subject can be maintained: “An adherent of empirical denotative method can hardly accept either the [classic] view which regards subjective mind as an aberration or [the modern view] which makes it an independent creative source. Empirically, it is an agency of novel reconstruction of a pre-existing order” (LW1:168).

There is a “radical” difference, Dewey says, between “individuals with minds [and] mind *as* individual” (LW1:169-70; emphasis original). Mind as a “connected whole” (LW1:232) is the active social system of meaning-habits operative in a given “social organization” (LW1:169): it is “a system of belief, recognitions, and ignorances, of acceptances and rejections, of expectancies and appraisals of meanings which have been instituted under the influence of custom and tradition” (LW1:170); “Mind denotes the whole system of meanings as they are

embodied in the workings of organic life...the field of mind – of operative meanings – ...is contextual and persistent...structural, substantial; a constant background and foreground” (LW1:230); “‘Mind’...in its existential occurrence, [is] an organization of physiological or vital affairs...” (LW1:218); “[T]he social character of meanings forms the solid content of mind” (LW1:7).

Mind *as* individual is “that phase of a system of meanings which at a given time is undergoing re-direction, transitive transformation” (LW1:233).³⁰⁷ Mind as the “system of meanings as they are embodied in the workings of organic life” (LW1:230) becomes individualized “when something within the meanings or in their application becomes dubious, and the meaning in question needs reconstruction” (LW1:8). Subjective mind, therefore, “denote[s] a distinctive and unique mode of existence, an object held in solution, undergoing transformation, to emerge finally as an established and public object” (LW1:170). It is “a mode of natural existence in which objects undergo directed reconstitution” (LW1:171). When used as a means of existential reconstruction of indeterminate situations, subjective mind is also the *agency* and “the method of change and progress in the significances and values attached to things. This trait is linked up to natural events by recurring to their particular and variable, their

307. This quote is from Dewey’s discussion of the distinction between mind and *consciousness*. For clarity, simplicity, and consistency, I am here equating “subjective mind” with “consciousness,” as I believe Dewey essentially equates these concepts in his theory of emergent mind. For instance, Dewey defines “subjective mind [as] a mode of natural existence in which objects undergo directed reconstitution” (LW1:171), and he defines consciousness almost identically: “Consciousness, an idea, is that phase of a system of meanings which at a given time is undergoing re-direction, transitive transformation” (LW1:233). In addition, in his discussion of subjective mind as a process of “ceaseless transformation,” he explains that “this process of flux and ineffability [which defines subjective mind] is intrinsic to any thought which is subjective and private. It marks ‘consciousness’ as bare event” (LW1:171). Given that “consciousness” is a notoriously elusive, contested, and even dubious concept within the mind sciences, I omit this term from my discussion as I believe that “mind” and “subjective mind” suffice to articulate Dewey’s theory as well as to develop my account. To incorporate a discussion of “consciousness” would be superfluous, complicating, and potentially misleading.

contingent, quality. In and of itself this factor is puzzling; it accounts for accidents and irrationalities” (LW1:7).

Subjective Mind as Agency of Reconstruction: Non-linear Activity of Emergent Systems

Thanks to insights from dynamic systems theory and process metaphysics, however, this factor is no longer puzzling but can be straightforwardly described as the naturalistic functioning of autopoietic process systems sustaining themselves in a state of far-from-thermodynamic equilibrium by dynamically transacting with other autopoietic unities in a functionally unified field or organization of complex process systems. In his discussion of the pattern of inquiry, Dewey writes that “at the outset, the habit that operates in an inference is purely biological. It operates without our being aware of it” (LW12:19-20). Here Dewey is referencing his notion of mind as a “property of a particular field of interacting events [which,] in its existential occurrence, [is] an organization of physiological or vital affairs...” (LW1:201; 218). Mind *just is* the biological-physiological activities of human animals in a context of social transactive communication. It is nothing set over and above these tangible activities, literally embodied, as they are, in the workings of organized social life. Dewey explains that unless mind is understood as such an organization of physiological affairs, “and unless its functions developed out of the patterns of organic behavior, it would have no pertinency to nature, and nature would not be the appropriate scene of its inventions and plans, nor the subject-matter of its knowledge” (LW1:218).

Mind, in other words, refers to the activity of a social organization when those activities are functioning smoothly, regularly, consistently, and predictably. This correlates to the stable quality of naturalistic events. Subjective mind as a transactive function of reconstruction of a system can be correlated to the precarious, constantly changing quality of a system. Recalling the

discussion of the pattern of inquiry at the beginning of this chapter, Dewey explains the pattern and process of inquiry according to the operation of living systems. In a functionally integrated, unified process system, life is “an integration” (LW12:32). The abstractions “organism” and “environment” are “indicative of a partial disintegration of a prior integration, but one which is of such a dynamic nature that it moves (as long as life continues) toward reintegration” (LW12:40). The key concept here is the *dynamic* nature of living systems, which is a technical concept referring to the non-linear activity of processes in emergent systems.

As discussed in chapter three, the non-linear or dynamic activity of open process systems inherently creates positive and negative feedback loops. Negative feedback activity (negentropy) serves to decrease the entropy in a system while positive feedback loops increase entropy, which is tantamount to an increase in disordered complexity. It is the tension between these two sorts of “error-reducing” and “error-amplifying” processes that supports the growth of a system.³⁰⁸ Semetsky explains that such growth equates, in epistemological terms, to *learning*.³⁰⁹ Semetsky further identifies Dewey’s term *transaction* as describing this constant tensional flow of energy throughout a system and across the spatial boundaries of structurally-coupled systems.³¹⁰ By constantly reorganizing itself toward “states of higher negative entropy,”³¹¹ a system grows-learns-expands in such a way that maintains its functional organization in such a manner that it can continuously and endlessly continue growing.

Dewey explains that subjective mind emerges as and with the problematic, indeterminate, precarious quality of a situation. As an “intermediate stage” in a system’s moving from a state of

308. Semetsky, “Re-reading Dewey Through the Lens of Complexity Science,” 82.

309. Semetsky, 82.

310. For a more practical and socially critical analysis of these phenomena, see Shannon Sullivan, *Living Across and Through Skins: Transactional Bodies, Pragmatism, and Feminism* (Bloomington, IN: Indiana University Press, 2001).

311. Semetsky, 82.

disequilibrium to a renewed equilibrium, subjective mind is characterized by “a peculiar intrinsic privacy and incommunicability” (LW1:171). This is because this state of uncertainty is marked not by meanings but by ineffability:

When an old essence or meaning is in process of dissolution and a new one has not taken shape even as a hypothetical scheme, the intervening existence is too fluid and formless for publication, even to one’s self. *Its very existence is ceaseless transformation.* Limits from which and to which are objective, generic, stateable; not so that which occurs between these limits. This process of flux and ineffability is intrinsic to any thought which is subjective and private. (LW1:171; emphasis added)

It is important to note that mind and subjective mind as qualitative functions of the communicative, autopoietic transactivity that constitutes social organizations are always simultaneously operative. A system is never in *either* a totally stable *or* totally unstable state; the degree of tension (which can be conceptualized as “stress,” as I discuss in chapter five) in a system is constantly fluctuating and essential for the maintenance of the system’s far-from-thermodynamic equilibrium stability, which is a tensional, or precarious, stability. The “social character of meanings [that] forms the solid content of mind” refer to the regular, recurrent, stable processes of a system, whereas the “particular and variable...contingent quality” (LW1:7) of processes refers to subjective mind as an “agency of novel reconstruction.” It is the functional integration of these qualities in existentially reconstructive action that constitutes intelligence:

physical science makes claim to disclose not the inner nature of things but only those connections of things with one another that determine outcomes and hence can be used as means. The *intrinsic* nature of events is revealed in experience as the immediately felt qualities of things. The intimate coordination and even fusion of these qualities with the regularities that form the objects of knowledge, in the proper sense of the word ‘knowledge,’ characterizes intelligently directed experience, as distinct from mere casual and uncritical experience. (LW1:6; emphasis original)

In this quote, Dewey reveals the necessity of somatic experiencing for intelligent inquiry, which entails integrating the conceptual contents of reflective thought (the “regularities that form the objects of knowledge”) with the “immediately felt qualities” that characterize reality “as such”

(i.e., the “intrinsic nature of events”). As noted above, the qualitative immediacy of experience is ineffable. It is literally impossible to name it, but it *can* be somatically *felt*.

Somatic Exercises and the Ineffability of Qualities

For Dewey, the starting point of all cognitive operations is the non-cognitive (LW1:29-30) or “‘subconscious’ of human thinking” (LW1:227). This is the level of “immediate” or “direct experience” (LW1:25) characterized by ineffable qualities which, as discussed above, cannot in principle be named or described. The “things” of immediate experience, Dewey explains, “are objects to be treated, used, acted upon and with, enjoyed and endured, even more than things to be known. They are things *had* before they are things cognized” (LW1:28; emphasis original). To *have* immediate experience in its ineffable qualities is to have a somatic encounter with such quality, “direct, immediate, and undefinable” (LW1:92).

Modern philosophy and psychology, premised on a mind-body, mind-world dualism in which an antecedently existing subject observes via an internal, computational mental process an external objective reality and constructs symbolic representations of said reality, is guilty of what Dewey critiques as

the great vice of philosophy...an arbitrary ‘intellectualism,’ [by which] is meant the theory that all experiencing is a mode of knowing, and that all subject-matter, all nature, is, in principle, to be reduced and transformed till it is defined in terms identical with the characteristics presented by refined objects of science as such. The assumption of ‘intellectualism’ goes contrary to the facts of what is primarily experienced. (LW1:28)

In contrast to the assumption that conscious, cognitive experience straightforwardly “reflects” or denotes an external world,³¹² Dewey stresses that “the brain is primarily an organ of a certain kind of behavior, not of knowing the world.³¹³ ...experiencing is just certain modes of

312. This is the “spectator, search-light, notion of consciousness” and cognition, which Dewey critiques as “artificial” (LW1:235).

313. John Brocklesby explains that empirical evidence from the neurobiology of perception and cognition shows that it is “a biological impossibility” to know the “real world” through symbolic representations of external

interaction, of correlation, of natural objects among which the organism happens, so to say, to be one. It follows with equal force that experience means primarily not knowledge, but ways of doing and suffering” (MW10:26). What Dewey means by “refined objects of science as such,” or generally “knowledge objects,” is not symbolic representations of antecedently existing, ontologically independent, objective entities in the external world. Despite his confusing use of the term, “objects of science” do not describe, name, or identify the “inner nature of things but only those connections of things with one another that determine outcomes and hence can be used as means. The intrinsic nature of events is revealed in experience as the immediately felt quality of things” (LW1:6).³¹⁴

Somatically – non-discursively, non-conceptually – *feeling* a situation is the basis of and essential for intelligent inquiry. As Dewey says in the *Logic*, “a situation is a whole in virtue of its immediately pervasive quality. ...the situation as a qualitative whole is sensed or *felt*” (LW12:73; emphasis original). Inquiry lacking a basis in the felt quality of a situation and thereby restricted to purely conceptual or dialectical operations is both meaningless and unintelligent, per Dewey:

But knowledge that is ubiquitous, all-inclusive and all-monopolizing, ceases to have meaning in losing all context; that it does not appear to do so when made supreme and self-sufficient is because it is literally impossible to exclude that context of non-cognitive but experienced subject-matter which gives what is *known* its import. (LW1:29; emphasis original)

To intelligently direct experience, Dewey maintains, requires bringing together the felt qualities of immediate experience and the conceptual abstractions taken in reflective thought: “The

“things.” See Brocklesby, “Reconnecting Biology, Social Relations and Epistemology – A Systemic Appreciation of Autopoietic Theory,” 660.

314. Dewey elaborates this point in various ways throughout *Experience and Nature*. E.g., “Timeless laws, *taken by themselves*, like all universals, express dialectic intent, not any matter-of-fact existence. But their ultimate implication is application; they are methods, and when applied as methods they regulate the precarious flow of unique situations. Objects of natural science are not metaphysical rivals of historical events; they are means of directing the latter” (LW1:119; emphasis original).

intimate coordination and even fusion of these qualities with the regularities that form the objects of knowledge, in the proper sense of the word ‘knowledge,’ characterizes intelligently directed experience, as distinct from mere casual and uncritical experience” (LW1:6).

In *Experience and Nature*, in the development of his theory of emergent mind, Dewey specifies what is involved in the qualitative ineffability of immediate experiencing:

Apart from language, from imputed and inferred meaning, we continually engage in an immense multitude of immediate organic selections, rejections, welcomings, expulsions, appropriations, withdrawals, shrinkings, expansions, elations and dejections, attacks, wardings off, of the most minute, vibrantly delicate nature. We are not aware of the qualities of many or most of these acts; we do not objectively distinguish and identify them. Yet they exist as feeling qualities, and have an enormous directive effect on our behavior. ... In a thoroughly normal organism, these ‘feelings’ have an efficiency of operation which it is impossible for thought to match. Even our most highly intellectualized operations depend upon them as a ‘fringe’ by which to guide our inferential movements. (LW1:227)

These qualities of “immediately-had” or *felt* experience are of primary and ultimate importance for Dewey’s empirical philosophy (LW1:24). Indeed, cognitive science has affirmed this importance, albeit in the dualistic language of the modern paradigm that Dewey is critiquing. As George Lakoff and Mark Johnson note, “conscious thought is the tip of an enormous iceberg [of subconscious thought]. It is the rule of thumb among cognitive scientists that unconscious thought is 95 percent of all thought – and that may be a serious understatement. Moreover, the 95 percent below the surface of conscious awareness shapes and structures all conscious thought.”³¹⁵

Where Lakoff and Johnson say “conscious thought,” Dewey would say “cognitive experience,” and where they say “subconscious thought” Dewey would say “non-cognitive experience” (LW1:29). Though it might seem that Dewey’s dichotomizing of “cognitive” and

315. George Lakoff and Mark Johnson, *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought* (New York, NY: Basic Books, 1999), 13.

“non-cognitive” undermines his own nondual thesis of ontological continuity, this is in fact entirely consistent with his account. For the very duality *cognitive–non-cognitive* is what Dewey calls a “reflective product” (LW1:19) of analytic experience, and in Dewey’s philosophy reflective products – i.e. concepts, terms, symbols, etc. – do not name states, conditions, or features of existence as such, which is to say that they do not describe the ontological nature of realities separate from the naming as in correspondence theories of truth, perception, and communication. Rather, concepts-namings-reflective products – such as “cognitive versus non-cognitive” – have a *functional* status and import determined in, through, as and by the consequences in future experience of actions *guided by* such namings.

Though Dewey at times writes with dichotomizing language (e.g., cognitive v. non-cognitive), I submit that this in no way undermines his continuity thesis. If anything, it can be taken to *confirm* Dewey’s position, for he explicitly claims that the characteristic feature of analytic-symbolic-conceptual-reflective thought is to *introduce distinctions* into an otherwise ontologically unified-integrated-continuous field of transactivity as a means of directing reconstructive action in that situational field. Dewey himself, which is to say his linguistic utterances (i.e. the written account of his integral experiencing, inclusive of his ineffable, somatically felt experiences), is not exempt from this, so it is only to be expected that his writing admits of terminological distinctions that have dichotomous character. Dewey was well aware of this, of course, which is why he stresses in “Qualitative Thought” that he can *only* be properly understood by “going beyond” his propositional statements and *having* a qualitative, somatically-felt experience of “the realities corresponding to the propositions laid down” (LW5:252).

Dewey also anticipates the critique of his account being self-undermining because inconsistent in its dualistic explication of continuity in the *Logic*, where he tries to resolve the

dilemma in terms of “universes of experience” and “universes of discourse” (LW12:74-75). As with the dichotomous “cognitive v. non-cognitive,” what must be stressed, as Dewey does, is that while the analytic formulation of the matter is achieved through the symbolic-linguistic distinctions *cognitive–non-cognitive* and *universe of discourse–universe of experience*, the inclusive, immediate reality remains wholly continuous. In other words, all cognitive experiences occur within a larger non-cognitive context and all universes of discourse occur within an encompassing universe of experience, and “*this* situation can never be transcended” (footnote 5: LW1:30; emphasis original). Ultimately, Dewey’s stance is this: the somatically felt qualities of immediate experience

are the stuff of ‘intuitions’ and in actuality the difference between an ‘intuitive’ and an analytic person is *at most* a matter of degree, of relative emphasis. The ‘reasoning’ person is one who makes his ‘intuitions’ more articulate, more deliverable in speech, as explicit sequence of initial premises, jointures, and conclusions. (LW1:227; emphasis added)

Yet, Dewey claims, we lack a means of engaging these qualities as directive of analytic thought:

We have at present little or next to no controlled art of securing that redirection of behavior which constitutes adequate perception or consciousness. That is, we have little or no art of education in the fundamentals, namely in the management of the organic attitudes which color the qualities of our conscious objects and acts. (LW1:239)

I submit that the somatic exercises characteristic of the contemporary mindfulness movement might be engaged as means of providing such an “art of education in the fundamentals, namely in the management of the organic attitudes which color the qualities of our conscious objects and acts.” Dewey, in fact, had a strong and enduring interest in somatic exercises, principally in the form of F. Matthias Alexander’s therapeutic body-awareness techniques. As Richard Shusterman writes, “Dewey’s emphasis on immediate nondiscursive experience and its continuity with higher intellectual activity is most fruitfully understood in this Alexandrian context: not as

foundational epistemology but as a panegyric to the somatic in the face of centuries of denigrating philosophical scorn.”³¹⁶

Dewey had success using the Alexander Technique to correct his posture, helping resolve persistent issues with headaches, neck pains, blurred vision, and stress.³¹⁷ Alexander’s method would today likely be considered by many a prototypical mindfulness practice. The technique consists of a range of exercises intended to help a practitioner notice and change established habits of movement and thinking.³¹⁸ For instance, a teacher might assist a student of the technique in slow, deliberate movement from a sitting to a standing position, or simply holding a certain posture with a balance between focused effort and relaxation. Focused breathing exercises are also employed as a means of helping students increase awareness of their autonomic, habitual behaviors and sensory experiences. Such strategies and exercises are rather like many mindful breathing practices and body-scan exercises common among MBIs today.³¹⁹

Dewey also discusses the necessity of a refined somatic awareness of the complexities and nuances of immediate experience in his essay “Body and Mind.” In this essay, he stresses that “in just the degree in which action, behavior, is made central, the traditional barriers between mind and body break down and dissolve” (LW3:28). Later in the essay, Dewey explains that since the ineffable qualities of immediate experience are primary and ultimate, a nuanced somatic awareness is essential for the intelligent direction of conduct:

In insisting upon the need of viewing action in its integrated wholeness, the need of discriminating between different qualities of behavior due to the mode of integration is emphasized, not slurred. We need to distinguish between action that is routine and action

316. Lakoff and Johnson, 13.

317. Ryan Alan, *John Dewey and The High Tide of American Liberalism*, Revised (New York, NY: W. W. Norton, 1997).

318. F. Matthias Alexander, *Constructive Conscious Control of the Individual*, Reprinted 8th (Bexley, OH: Integral Press, 1955).

319. Greater Good Science Center, “Body Scan Meditation,” n.d., https://ggia.berkeley.edu/practice/body_scan_meditation. Accessed May 28, 2020.

alive with purpose and desire; between that which is cold, and as we significantly say inhuman, and that which is warm and sympathetic; between that which marks a withdrawal from the conditions of the present and a retrogression to split off conditions of the past and that which faces actualities; between that which is expansive and developing because including what is new and varying and that which applies only to the uniform and repetitious; between that which is bestial and that which is godlike in its humanity; between that which is spasmodic and centrifugal, dispersive and dissipating, and that which is centred and consecutive. Until we can make such distinctions and make them in a multitude of shades and degrees, we shall not be able to understand the conduct of individuals, and not understanding, shall not be able to help them in the management of their lives. Because of this lack, education will be a guess in the dark; business a gamble in shifting about and circulating material commodities, and politics an intrigue in manipulation. (LW3:30)

Indeed, the primary, central, and ultimate importance of non-discursive, qualitative somatic experiencing for inquiry is the basis of Dewey's principle of continuity and thereby the means of avoiding the experience-nature duality underlying so many of the philosophical problems Dewey seeks to leave behind: "Since the seventeenth century this conception of experience as the equivalent of subjective private consciousness set over against nature, which consists wholly of physical objects, has wrought havoc in philosophy" (LW1:21). Dewey elaborates:

When intellectual experience and its material are taken to be primary, the cord that binds experience and nature is cut. ... The brain and nervous system are primarily organs of action-undergoing; biologically, it can be asserted without contravention that primary experience is of a corresponding type. Hence, unless there is breach of historic and natural continuity, cognitive experience must originate within that of a non-cognitive sort. (LW1:29-30)

The irony is that it is precisely the lack of such a somatic basis of inquiry that prevents intellectuals from understanding the need for somatic experiencing in inquiry and social change. In the introduction to Alexander's *Constructive Conscious Control of the Individual*, Dewey suggests that "the principle and procedure set forth by Mr. Alexander are crucially needed at present. Strangely, this is the very reason why they are hard to understand and accept" (MW15:308). He explains that even though the book is conceptually simple and straightforward, nobody can "grasp its full force without having actual demonstration of the principle in

operation” (MW15:308). This is the same idea that Dewey communicated in “Qualitative Thought” and *Logic*, that the best way to “get” what he is saying is to have an experience of the sort of processes and phenomena he discusses.

In other words, Dewey is simply being consistent with what he is claiming: all intellectual operations are dependent on, grow out of, are guided by, and function to enrich non-cognitive, somatic experiencing of qualitative immediacy (LW1:29). If one *has* an experience of the qualitative nature of thought and the naturalistically logical operation of biological functions,³²⁰ one can grasp Dewey’s meaning much more efficiently than if one tries to understand him purely through conceptual, analytic thought. As he explains following his explication of the many sorts of “feeling qualities” characteristic of somatic, “subconscious”³²¹ experience, “in a thoroughly normal organism, these ‘feelings’ have an efficiency of operation which it is impossible for thought to match. Even our most highly intellectualized operations depend upon them as a ‘fringe’ by which to guide our inferential movements” (LW1:227).

While in one sense it is ironic that the very lack of somatic experiencing in intellectual pursuits prevents an understanding of the need for such experiencing, it is perfectly reasonable that this has been slow to catch on among academics and scholars. As Richard Shusterman details, the *soma* as an essential part of our holistic, mindful cognizing of experience has been

320. William S. Cooper, *The Evolution of Reason: Logic as a Branch of Biology* (New York, NY: Cambridge University Press, 2003).

321. I relativize “subconscious” because I think the conscious-subconscious duality typical of modern theories of mind and cognition is misleading. Even though somatic, qualitative experience may not be explicitly conceptual the way that analytic experience (such as discoursing with words) is, I do not believe that this warrants categorizing somatic experiencing “subconscious” and especially not “non” or “unconscious.” Our embodied experience is most definitely highly aware of enviroing conditions, as recent neurophysiological research demonstrates. Stephen W. Porges, for instance, originator of the Polyvagal Theory of the vagus nerve, coined the term “neuroception” to describe our somatic, body-based “perception” of the world which operates continuously and much more efficiently than perception through conceptual, reflective, analytic thought. See Stephen W. Porges, *The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication, and Self-Regulation* (W. W. Norton & Company, 2011).

rather systematically denigrated in Western philosophy for some time.³²² To be sure, recent generations of philosophers have begun to write *about* the body (e.g. Foucault), but literally incorporating somatic practices into the process of inquiry itself is still comparatively rare. And, due to the habit of neglecting the role of embodied experience in inquiry, thinkers lack the non-discursive, somatic sensitivities requisite for detecting the subtleties of non-cognitive experience that most directly and effectively demonstrate the need for such sensitivities:

The chief difficulty [in understanding the need for somatic experiencing], as I [Dewey] have said, lies in the fact that it is so badly needed. . . . The principle is badly needed, because in all matters that concern the individual self and the conduct of its life, there is a defective and lowered sensory appreciation and judgment, both of ourselves and of our acts, which accompanies our wrongly-adjusted psycho-physical mechanisms. It is precisely this perverted consciousness which we bring with us to the reading and comprehension of Mr. Alexander's pages, and which makes it hard for us to realize his statements as to its existence, causes and effects. (MW15:308)

Indeed, as Dewey explains in *Experience and Nature*, “our deepest-seated habits are precisely those of which we have least awareness” (LW1:235). I contend that the modern habit of assuming the ontological independence and antecedent existence of individuals who “have” minds and exercise faculties of mind at will is one such habit, and that this habit has manifested in the mindfulness movement as the “mindful brain” approach to meditation and persists in the psychological sciences through the continued dominance of the mental-cognitivist paradigm of mind.³²³ Dewey recognized the difficulty in overcoming these habitual assumptions as to the nature of mind, being as deeply embedded in our culture as they are.

Here we can begin to see the role and significance of somatic exercises engaged through the perspective of Dewey's autopoietic process ontology. Rather than a means of turning inward

322. Richard Shusterman, “Dewey on Experience: Foundation or Reconstruction?” in *Dewey Reconfigured: Essays on Deweyan Pragmatism*, ed. Casey Haskins and David I. Seiple (Albany, NY: SUNY Press, 1999), 193–219.

323. Alan Jurgens and Michael D. Kirchhoff, “Enactive Social Cognition: Diachronic Constitution and Coupled Anticipation,” *Consciousness and Cognition* 70 (2019): 1–10.

to explore an internal realm of subjective mental experiences and thoughts, somatic practices engaged as a tool for critical social inquiry would serve to help guide reconstructive action of a social situation. Such practices would be developed as a means of employing subjective mind as a transactive function of social systems. Dewey's autopoietic process ontology enables this by understanding subjective experience not as internal to the mentalistic mind of an individual but as a qualitative function of mind defined as the organizational dynamics of a social system understood as an autopoietic unity. This is the perspective from which Dewey speaks when he diagnoses the "disease" of modern culture:

The world seems mad in preoccupation with what is specific, particular, disconnected in medicine, politics, science, industry, education. In terms of a conscious control of inclusive wholes, search for those links which occupy key positions and which effect critical connections is indispensable. But recovery of sanity depends upon seeing and using these specifiable things *as* links functionally significant in a process. To see the organism *in* nature, the nervous system in the organism, the brain in the nervous system, the cortex in the brain is the answer to the problems which haunt philosophy. And when thus seen they will be seen to be *in*, not as marbles are in a box but as events are in history, in a moving, growing never finished process. Until we have a procedure in actual practice which demonstrates this continuity, we shall continue to engage in appealing to some other specific thing, some other broken off affair, to restore connectedness and unity—calling the specific religion or reform or whatever specific is the fashionable cure of the period. Thus we increase the disease in the means used to cure it. (LW1:224-25; emphasis original)

Continuity of experience on both the individual and social level is established through and by somatic experiencing of the unifying qualities of situations. In other words, the qualitative experience of "dis-ease" of a social world characterized by fragmentation and disconnection is simultaneously an "individual" and "social" phenomenon. In this framework, the subjective experience of dis-ease – i.e. distress, anxiety, etc. – is not primarily an individual phenomenon in the modern sense of a subjective experience owned by and contained within an ontologically discrete entity (individual organism). Rather, the subjective experience of dis-ease is an experience of the quality of a disintegrated social *situation*.

Such experience is the awareness of “subjective mind” as a transactive function of the social system itself, or as Dewey puts it in the quote above, the organism (or any functional part of a multi-level biological system abstracted *as* a “level” or part within a larger whole) is a “link...functionally significant in a process.” *Using* the somatic experiencing of such “subjectively experienced” situational qualities to guide action that serves the redintegration³²⁴ of the social situation is the essence of “mindful inquiry” in the sense that such activity restores the fullness of mind defined as the holistic organizational dynamics of a social system that functions autopoietically. Such restoration of unified integration of a social situation is the goal of Deweyan inquiry and simultaneously serves to redress the dis-ease experienced by the functional components of that situation – i.e. individual persons – precisely because that dis-ease *is* the condition of a previously-unified situation disintegrated such that its parts are experienced *as* individual. This is the meaning of subjective mind defined as “an agency of novel reconstruction of a pre-existing order” (LW1:168).

This approach to somatic experiencing of qualities of subjective mind is effectively a reversal of the typical approach of contemporary MBIs. Rather than responding to a situational state of dis-ease – experienced individually as distress, anxiety, depression, etc. – by engaging with that quality as a personal, internal phenomenon, the mindful inquiry approach would employ somatic exercises to guide concrete, tangible action in the world with the express intent of using that experiencing as a means of indicating what *in the situation* needs to be changed to restore a condition of functional integration to the larger social system of which each of us exists as a component process. In the final chapter, I discuss in depth the differences between these two approaches.

324. *Redintegration* is the restoration of a whole from a component part or process of that whole.

Chapter Five – Stressful Situations and Mindful Inquiry

Introduction: Mindful Inquiry as Reconstruction of Social Organization

This chapter presents and applies via a comparative case study my notion of *mindful inquiry*. In short, mindful inquiry is the engagement of subjective mind as a functional quality of (social) mind via somatic practices such as those employed in MBIs, with the express goal of using the qualities of subjective mind as means in the tangible reconstruction of the social organization that constitutes mind. Consequential to the development of Dewey's theories of mind and inquiry in chapters two, three, and four, mindful inquiry entails the following key ideas: the qualities characterizing a problematic situation and thus prompting inquiry – e.g., stress – are qualities *of the situation* and not of individuals in the modern subjectivist sense; inquiry aims at literal reconstruction of an existential situation, where a renewed integrated quality simultaneously closes one process of inquiry and establishes the conditions for further inquiry; subjective mind is not the mind *of* individuals but is a functional quality of the transactivity of mind as the dynamics of a social organization (here modeled as an autopoietic system) in a given situational context; and, inquiry is a transactive, emergent function of social organizations as unified wholes. In this way, inquiry can be modeled as the cognitive correlate of the basic autopoietic life process itself: its only product is itself, which is to say the goal of inquiry is to maintain the conditions necessary for further inquiry.

First, I will develop my account of mindful inquiry according to the key ideas listed above. Second, I will show how this approach differs fundamentally from the typical strategy employed in MBIs in the contemporary mindfulness movement. As a comparative case study, I will examine the standard example of using MBIs to address a situation in which students feel stressed. The typical MBI approach, premised on the modern assumptions of mind and the

subject, assume that students are ontologically-independent individuals whose stress is an internal quality or experience localized within a spatially-bounded subject whose being is likewise contained within that boundary; i.e., what Dewey calls “self-sufficing” individuals (LW1:134). The solution to such stress, therefore, is to employ mindfulness practices such as meditation to *internally* reduce these individuals’ stress levels. Conversely, the mindful inquiry approach would understand the stressful quality of the situation to be just that: a quality *of the social situation* as an emergent – i.e. autopoietically self-organizing – whole. Thus, the task would be to employ mindfulness practices to better perceive the nuances of that stressful quality in order to discern how best to engage in reconstructive action that re-organizes the dynamics of the situation such that a more integrated functioning of all component parts (i.e. individuals – students, teachers, etc.) is achieved.

A final concluding section will summarize my thesis and discuss the theoretical and practical efforts needed in order for Dewey’s metaphilosophical reconstruction of philosophy to fully manifest. The emerging paradigm of mind, based on the life-mind continuity thesis, construes mind and inquiry as transactive functions emergent at the level of social organizations as unified wholes. Adopting this paradigm and practice of mindful inquiry requires substantive change at two interrelated levels: the pedagogical and institutional. At the pedagogical, locally functional level, mindful inquiry means that some sort of somatic practice is necessary for inquiry. Somatic practices should not be considered an optional, tangential, *ad hoc* tool for supporting inquiry conceived as primarily or purely mental activity; rather, somatic experiencing is the primary and ultimate context and guide for all inquiry as such.

At the institutional level, adopting Dewey’s paradigm of mind and inquiry requires substantive reconstruction of the structure of research disciplines, fields of study, and the

organization and practice of human inquiry generally. Drawing from Dewey, I will discuss two main aspects of this: developing philosophy as a social science that deals with the gross, complex, macro-level of social phenomena, and the re-integration of philosophy and science through the common pattern of Dewey's unified theory-practice of inquiry. Lastly, I will suggest areas for further research and how my thesis connects with related developments in similar fields of study.

Mindful Inquiry: Key Ideas from Dewey's Process Pragmatism

In chapters two and three, I established that in Dewey's process pragmatism, nature is constituted by a continuum of organizations of energies. All existents within this continuity are qualified by their eventual function within a given organized field of transactivity. And, where an organized field of transactivity is unified by a pervasive quality, it exists as what Dewey calls a "situation," which is the functional context in which the process of inquiry emerges and functions. This yields the dictum that subjective mind is a functional quality of the transactivity constituting functionally integrated social situations, or mind as such. The qualities experienced as subjective mind correlate with an increase in the precarious characteristics of a situation such that a situation becomes indeterminate or "problematic." When a situation's quality becomes problematic, the conditions for inquiry are set. Guided by the unique qualities of the given problematic situation, which can be sensed or felt via a somatic experiencing, individuals as "centers of experience" (LW1:23) function to resolve the indeterminate quality of the situation by literally re-organizing the transactivity of the situation in such a way as to bring about a renewed integration among the dynamic interactivity of the components of the situation.

From this general sketch of Dewey's theories of mind and inquiry, three specific ideas follow. These key ideas are essential for my notion of mindful inquiry. They are: 1) felt qualities

are qualities *of a situation* and thus do not originate within and are not restricted to internal “mental” states of individual subjects; 2) the resolution of a problematic situation via a process of inquiry requires some actual, existential change in the system-situation, not simply a mental or intellectual change obtaining on the level of ostensibly independent individuals; and 3) inquiry is therefore technically an emergent function of whatever social organization – as autopoietic system – is manifest in a given situation, rather than simply a mental or intellectual process contained within spatially-bounded individual subjects.

Qualities Are of a Situation

In various of Dewey’s *Later Works*, he clarifies that the qualities felt or had in immediate experience are qualities *of nature itself* rather than internal mental, emotional, or affective states of ontologically independent subjects. In *Art as Experience*, Dewey describes the aesthetic character of nature by noting that “nature is kind and hateful, bland and morose, irritating and comforting, long before she is mathematically qualified or even a congeries of ‘secondary’ qualities like colors and their shapes” (LW10:21). In *Experience and Nature*, he writes that “the world is precarious and perilous” (LW1:44; emphasis original), that

Things are beautiful and ugly, lovely and hateful, dull and illuminated, attractive and repulsive. Stir and thrill in us is as much theirs as is length, breadth, and thickness. Even the utility of things, their capacity to be employed as means and agencies, is first of all not a relation, but a quality possessed; immediately possessed, it is as esthetic as any other quality (LW1:91; emphasis original);

[and that]

Without language, the qualities of organic action that are feelings are pains, pleasures, odors, colors, noises, tones, only potentially and proleptically. With language they are discriminated and identified. They are then ‘objectified’; they are immediate traits of things. This ‘objectification’ is not a miraculous ejection from the organism or soul into external things, nor an illusory attribution of psychical entities to physical things. *The qualities never were ‘in’ the organism; they always were qualities of interactions in which both extra-organic things and organisms partake.* When named, they enable

identification and discrimination of things to take place as means in a further course of inclusive interaction. *Hence they are as much qualities of the things engaged as of the organism.* (LW1:198-99; emphasis added)

This is crucial for understanding inquiry as a function of a social system and not merely an internal, mental process contained within an individual subject. As Dewey specifies in the *Logic*, “a variety of names serves to characterize indeterminate situations. They are disturbed, troubled, ambiguous, confused, full of conflicting tendencies, obscure, etc. It is the *situation* that has these traits. *We* are doubtful because the situation is inherently doubtful” (LW12:109; emphasis original). That the problematic quality prompting inquiry is of the situation therefore means that successful inquiry requires an existential change in the situation-system itself, as detailed below.

Inquiry Requires Existential Change in Situation, Not Merely Mental or Internal Adjustment

Dewey explains the qualitative nature and process of inquiry as follows:

The peculiar quality of what pervades [a given situation], constituting [it] a situation, is not just uncertainty at large; it is a unique doubtfulness which makes that situation to be just and only the situation it is. It is this unique quality that not only evokes the particular inquiry engaged in but that exercises control over its special procedures. (LW12:109)

And, Dewey continues, because it is the *situation* that is characterized by a quality of doubtfulness, the resolution of the experience of doubt is to be accomplished by changing something in the environment, not merely adjusting a supposed subject’s “personal state of mind:”

Personal states of doubt that are not evoked by and are not relative to some existential situation are pathological; when they are extreme they constitute the mania of doubting. Consequently, situations that are disturbed and troubled, confused or obscure, cannot be straightened out, cleared up and put in order, by manipulation of our personal states of mind. The attempt to settle them by such manipulations involves what psychiatrists call ‘withdrawal from reality.’ Such an attempt is pathological as far as it goes, and when it goes far it is the source of some form of actual insanity. The habit of disposing of the doubtful as if it belonged only to *us* rather than to the existential situation in which we are caught and implicated is an inheritance from subjectivistic psychology. (LW12:109-10; emphasis original)

Later in the *Logic*, Dewey again asserts that the establishment of a renewed integration in a situation's quality – which marks the close of a successful inquiry – necessarily requires tangible reconstruction of existential conditions:

The biological antecedent conditions of an unsettled situation are involved in that state of imbalance in organic-environmental interactions which has already been described. Restoration of integration can be effected, in one case as in the other, only by operations which actually modify existing conditions, not by merely 'mental' processes. (LW12:218)

Indeed, Dewey specifies that all aspects of inquiry, even those that might be assumed to be purely "mental" – i.e., reflective thought via the manipulation of concepts, symbolic contents, etc. – should be "taken in as literal a sense as possible" (LW12:22). In a discussion of how his empirical method understands reflective thinking to occur within some "actually *problematic*...specifiable situation," Dewey says that

thinking is no different in kind from the use of natural materials and energies, say fire and tools, to refine, re-order, and shape other natural materials, say ore. In both cases, there are matters which as they stand are unsatisfactory and there are also adequate agencies for dealing with them and connecting them. At no point or place is there any jump outside empirical, natural objects and their relations. Thought and reason are not specific powers. They consist of the procedures intentionally employed in the application to each other of the unsatisfactorily confused and indeterminate on one side and the regular and stable on the other. Generalizing from such observations, empirical philosophy perceives that thinking is a continuous process of temporal re-organization within one and the same world of experienced things, not a jump from the latter world into one of objects constituted once for all by thought. (LW1:61)

Inquiry is a Function of a Social System

Given how thoroughly embedded is modern subjectivism in psychology and philosophy, it is worthwhile to revisit and emphasize Dewey's assertion that subjective mind is neither "an aberration [n]or...an independent creative source. Empirically, it is an agency of novel reconstruction of a pre-existing order" (LW1:168). On my interpretation of Dewey's accounts of

mind and inquiry, rendered through an emergent, process autopoietic ontology, subjective mind as well as inquiry as such should be understood as emergent functions of social organizations, rather than processes or activities performed exclusively or even primarily by individual subjects. Dewey, in fact, comes very close to stating this explicitly.

As has been much discussed in Deweyan scholarship, the notion of “experience” is notoriously misleading.³²⁵ I think that a large part of the difficulty stems from the modern subjectivist assumptions that experience has to *belong to* some-one or some-thing. Dewey addresses this directly in a section of *Experience and Nature*. He says that the critic’s question “‘whose experience?’...is asked in adverse criticism. Its implication is that experience by its very nature is owned by some one; and that the ownership is such in kind that everything about experience is affected by a private and exclusive quality” (LW1:178-79).

The implication that because a natural event or experience such as the transactive function “subjective mind” involves a spatially distinct existence (i.e. an “individual subject”), such an experience is therefore “subjective or mental...is absurd” (LW1:171; 179). Dewey explains that “experience when it happens has the same dependence upon objective natural events, physical and social, as has the occurrence of a house. It has its own objective and definitive traits; these can be described without reference to a self, precisely as a house is of brick, has eight rooms, etc., irrespective of whom it belongs to” (LW1:179).

“Experience,” Dewey explains, “does not go on simply inside a person” (LW13:22). “Experience, a serial course of affairs with their own characteristic properties and relationships, occurs, happens, and is what it is” (LW1:179). What modern subjectivist psychology regards as individuals in the sense of entities with antecedent and independent ontological standing, Dewey

325. Hook, “Introduction,” viii.

regards as “events” that occur within experience, just as houses, thunderstorms, or football games occur within nature understood as a “complex of events” (LW1:66). As he explains elsewhere, “private consciousness is an incidental outcome of experience of a vital objective sort; it is not its source” (MW10:8); and, the “private and incommunicable [is a] pervasive color and temper of experience,” not a substance, entity, or subject in its own right (LW1:187).

Dewey thus concludes that “the ownership of meanings or mind thus vests in nature” (LW1:219). He explains that “in first instance and intent, it is not exact nor relevant to say ‘I experience’ or ‘I think.’ ‘It’ experiences or is experienced, ‘it’ thinks or is thought, is a juster phrase” (LW1:179). Given this understanding of experience and that Dewey defines inquiry as a “developed mode of [organic] behavior” (LW12:42), I believe that inquiry can be properly understood as a naturalistic event emerging within the dynamic activity of social organizations. Just as experience “occurs, happens, and is what it is,” I contend that in living systems, inquiry “occurs, happens, and is what it is.” Dewey explains that to impart ownership to naturalistic occurrences via verbal-linguistic identification with a process is a matter of accepting responsibility and liability for expected outcomes of a situation and not a matter of identifying ontological origination:

To say in a significant way, ‘I think, believe, desire,’ instead of barely ‘it is thought, believed, desired,’ is to accept and affirm a responsibility and to put forth a claim. It does not mean that the self is the source or author of the thought and affection nor its exclusive seat. It signifies that the self as a centred organization of energies identifies itself (in the sense of accepting their consequences) with a belief or sentiment of independent and external origination. ...Natural events—including social habits—originate thoughts and feelings. (LW1:179-80; emphasis original)

That the source, author, or origination of thoughts and feelings are natural social events, not individual subjects, is an important aspect of understanding how and why inquiry – as itself an emergent social occurrence (LW1:62) – necessarily entails a reconstruction of some aspect of the

situation in which inquiry takes place. This understanding of the experiential qualities of social situations also mitigates against the misguided applications of mindfulness in the contemporary mindfulness movement.

Responding to Stress via Modern Subjectivist MBIs: The Reification of Stressful Conditions via the Neoliberalization of Mindfulness

In chapter one I argued that most research and application of mindfulness has, knowingly or not, been conducted according to the modern paradigm of mind. As a result, virtually all applications of mindfulness-based interventions have functioned to perpetuate some degree of what Dewey calls “extreme modern subjectivism.” Here I will show how this typically manifests in applications of mindfulness in education and how, ultimately, this approach enables the neoliberalization of mindfulness through the privatization and internalization of stress. One of the most common experiences educators have attempted to address is the increasing rate of student stress (and correlate experiences such as anxiety, social anxiety, depression, etc.). I will examine a few articles discussing the use of mindfulness to lower student stress. All studies I have found fail to employ mindfulness in a critical, socially-reconstructive manner because they begin with the assumption that students’ stress is an individual, internal phenomenon and therefore can be addressed by adjusting the internal mental and/or physiological state of individuals. In the very rare cases when a scholar or teacher of mindfulness acknowledges that our social environment contains conditions and factors contributing to personal stress, it is still the individual person’s phenomenological experience of stress that receives primary attention as the commonsensical site of a mindfulness “intervention.”

Student Stress: A Contemporary Epidemic

Over the past two decades, the prevalence of student stress across all levels of schooling has significantly increased. Countless research studies, clinical analyses, and news reports have

explored various aspects of this phenomenon, some even going as far as to call the rise in student stress an “epidemic.”³²⁶ Mandy D. Bamber and Joanne Kraenzle Schneider note that even though research on and attempts to quell college student stress began over 50 years ago, “stress continues to be a debilitating problem for college students.”³²⁷ Colleen S. Conley, Joseph A. Durlak, and Daniel A. Dickson explain that emotional distress, including anxiety and depression, “constitute the most commonly experienced adjustment problems of higher education students.”³²⁸ Bamber and Schneider affirm that “a majority of college students reported that their stress was above average or extreme.”³²⁹ Recent research reveals that in higher education, experiences of stress and/or anxiety are common and relatively consistent across identities, academic programs, and types of institutions. The Center for Collegiate Mental Health at Penn State (CCMH), for instance, reports that between 2009 and 2015, student visits to campus counseling centers increased by an average of 30-40%.³³⁰ In addition, between 2012 and 2017, reporting shows an annual increase in the prevalence of anxiety cited as the main reason students sought counseling on campus.³³¹ The latest CCMH report documents anxiety, depression, and stress as the three most common experiences (at relatively equal rates) prompting students to visit counseling centers.³³² These trends are not isolated to institutions of schooling, however.

326. Mary Ellen Flannery, “The Epidemic of Anxiety Among Today’s Students,” NEA Today, March 28, 2018, <http://neatoday.org/2018/03/28/the-epidemic-of-student-anxiety/>.

327. Mandy D. Bamber and Joanne Kraenzle Schneider, “Mindfulness-based meditation to decrease stress and anxiety in college students: A narrative synthesis of the research,” *Educational Research Review* 18 (2016): 2.

328. Colleen S. Conley, Joseph A. Durlak, and Daniel A. Dickson, “An Evaluative Review of Outcome Research on Universal Mental Health Promotion and Prevention Programs for Higher Education Students,” *Journal of American College Health* 61, no. 5 (2013): 298.

329. Conley, Durlak, and Dickson, 298.

330. “Annual Collegiate Mental Health Report Examines Trends and Policy Implications | Penn State University,” accessed January 24, 2020, <https://news.psu.edu/story/554203/2019/01/16/academics/annual-collegiate-mental-health-report-examines-trends-and-policy>.

331. “Annual Collegiate Mental Health Report.”

332. Peter LeViness et al., “The Association for University and College Counseling Center Directors Annual Survey 2018,” October 2019, 41. <https://www.aucccd.org/assets/documents/Survey/2018%20aucccd%20survey-public-revised.pdf>.

The World Health Organization recently reports that depression is now the leading cause of disability globally.³³³ And, within months of the onset of the COVID-19 pandemic, rates of depression among U.S. adults more than tripled.³³⁴

These trends have been confirmed by many other research institutions. According to the National College Health Association, 65.7% of college students in 2019 reported experiencing “overwhelming anxiety” in the prior year.³³⁵ Moreover, the percentage of students reporting overwhelming anxiety has significantly increased over the past decade, rising to the 2019 rate from 49.1% in the 2008 survey.³³⁶ Such trends have inspired many scholars in the field to speak of a “mental health crisis” in higher education. For instance, Dr. Stephanie Pinder-Amaker, founding director of McLean Hospital’s College Mental Health Program and Assistant Professor of Psychology at Harvard Medical School, says that even though more students are seeking mental health treatment on campus than at any time in the past, “upwards of 80%...of students who self-identify as having significant symptoms that might indicate a mental disorder, depression, anxiety...are not seeking treatment for those symptoms.”³³⁷

Similar trends are being identified in adolescents. A recent article published by the National Education Association reveals that even in kindergarten, students are feeling anxious

333. World Health Organization, “Depression and Other Common Mental Disorders: Global Health Estimates,” (2017): 1-24. Retrieved from <http://apps.who.int/iris/bitstream/10665/254610/1/WHO-MSD-MER-2017.2-eng.pdf>

334. Catherine K. Ettman, et al., “Prevalence of Depression Symptoms in US Adults Before and During the COVID-19 Pandemic,” *JAMA Network Open* 3, no. 9 (9/1/2020): 1-12 (e2019686). doi:10.1001/jamanetworkopen.2020.19686.

335. “Reference Group Executive Summary Spring 2019,” National College Health Assessment II (Silver Spring, MD: American College Health Association, 2019), 14.

336. “Reference Group Executive Summary Fall 2008,” National College Health Assessment II (Baltimore, MD: American College Health Association, 2009), 14.

337. Jill Anderson, “Harvard EdCast: Prioritizing Mental Health in College,” Harvard Graduate School of Education, October 24, 2019, <https://www.gse.harvard.edu/news/19/10/harvard-edcast-prioritizing-mental-health-college>.

about the academic expectations placed on them.³³⁸ And at the teenage level, a recent PEW survey shows that a majority of teens report anxiety and depression as a “major problem” among their peers, more than bullying, drug and alcohol addiction, and poverty.³³⁹ Naturally, as with any complex and widespread social phenomenon, there is much discussion of the precise causes of the trends purportedly revealed by this research. Regardless of these details, however, it is clear that in some degree, and for whatever reason, students of all ages frequently experience stress in such a way as to negatively impact academic performance.³⁴⁰ In response, mindfulness-based interventions have increasingly been employed in efforts to address this phenomenon.

Indeed, as Purser notes,

Mindfulness would not be where it is without the problem of stress. The two phenomena are opposite sides of the same modern coin. So pervasive is the discourse of stress, and such is the drain on profits due to stress-related work leave, that a professor of psychology has claimed that ‘stress is the 21st-century equivalent of the Black Death.’³⁴¹

MBIs in a Modern Subjectivist Paradigm: The Internalization of Stress

As with research on the prevalence and causes of student stress, the past couple decades have seen a dramatic increase in the number of studies examining the structure, application, and effectiveness of mindfulness-based interventions in helping reduce all manner of student mental health and academic performance concerns, including anxiety, depression, inability to focus, social-emotional competence, and physical health. Given that the field of mindfulness studies is still in its nascent stage, however, there is very little consistency in the measures, methodology,

338. Mary Ellen Flannery, “The Epidemic of Anxiety Among Today’s Students,” NEA Today, March 28, 2018, <http://neatoday.org/2018/03/28/the-epidemic-of-student-anxiety/>

339. Juliana Menasce Horowitz and Nikki Graf, “Most U.S. Teens See Anxiety, Depression as Major Problems,” *Pew Research Center’s Social & Demographic Trends Project* (blog), February 20, 2019, <https://www.pewsocialtrends.org/2019/02/20/most-u-s-teens-see-anxiety-and-depression-as-a-major-problem-among-their-peers/>. Accessed 6/1/2020.

340. Serap Akgun and Joseph Ciarrochi, “Learned Resourcefulness Moderates the Relationship Between Academic Stress and Academic Performance,” *Educational Psychology* 23, no. 3 (June 1, 2003): 287–94.

341. Purser, *McMindfulness*, 47.

and reporting of effectiveness of MBIs.³⁴² Nonetheless, the vast majority of literature discussing MBIs shares a set of theoretical assumptions rooted in the modern subjectivist paradigm of mind, and that set of assumptions will be my focus here.

Specifically, what is significant for my analysis are the assumptions embedded in the literature about mind and stress. The consistent assumption is that mind – and experience generally, including emotion, affect, thought, and inquiry – is a personal, internal phenomenon contained within an ontologically-independent individual, where that independence is defined by an individual’s spatial-physical boundedness. It follows from this that stress is also an individual experience, and the best way to reduce such individually-experienced and physically internal stress is to employ some sort of mindfulness practice as a means of adjusting the internal state of the individual and thereby, hopefully, lowering each individual’s phenomenological experience of stress.

The premises that mind and experiences such as stress are by definition individual, personal, subjective phenomena is a product of the modern subjectivist paradigm of life-mind and undergirds the general framework of MBIs in contemporary efforts to address the epidemic of student stress. Specifically, this manifests as employing MBIs to increase individuals’ “self-resilience” and “coping” skills, and all relevant constructs in this framework are linked and mutually defined. As Bamber and Schneider write, “stress is the perception that a situation or event exceeds coping resources.”³⁴³ In another recent study of the effectiveness of yoga and

342. Alberto Chiesa, “The Difficulty of Defining Mindfulness: Current Thought and Critical Issues,” *Mindfulness* 4 (2013): 255–68.

343. Bamber and Schneider, “Mindfulness-based Meditation to Decrease Stress and Anxiety in College Students,” 2.

meditation to help college students cope with stress, stress is “defined as ‘a state of mental or emotional strain or tension resulting from adverse or very demanding circumstances.’”³⁴⁴

Defining stress as an inadequacy of ability to cope naturally leads to research and interventions focused on increasing individuals’ coping skills. In a study of the effectiveness of mindful yoga to help reduce students’ experiences of stress, Dessa Bergen-Cico, Rachel Razza and Amy Timmins explain that mindfulness programs aim to “cultivate habits of mind and behavior to foster resilience, health and well-being in the face of everyday adversity.”³⁴⁵ They further discuss how “mindfulness is characterized by attentive awareness that is conceptually grounded in self-regulation theory”³⁴⁶ and that such interventions show promise for schools “in that they promote self-regulation skills and resilience to stress and are highly accepted by students and teachers.”³⁴⁷

While the inner-internal, individual conceptualization of experience might only be implicit in such studies of MBIs’ effectiveness, some mindfulness scholars are emphatically explicit about defining mindfulness as a matter of inward-turning attention. For instance, Oren Ergas, one of the most prolific philosophers of education writing on mindfulness and contemplative education, has constructed a mindfulness-based philosophy of education characterized by what he calls the “inner curriculum.” Ergas is concerned that contemporary

344. Virginia Lemay, John Hoolahan, and Ashley Buchanan, “Impact of a Yoga and Meditation Intervention on Students’ Stress and Anxiety Levels,” *American Journal of Pharmaceutical Education* 83, no. 5 (2019), 747.

345. Dessa Bergen-Cico, Rachel Razza, and Amy Timmins, “Fostering Self-Regulation Through Curriculum Infusion of Mindful Yoga: A Pilot Study of Efficacy and Feasibility,” *Journal of Child and Family Studies* 24 (2015): 3448.

346. Bergen-Cico, Razza, and Timmins, “Fostering Self-Regulation Through Curriculum Infusion of Mindful Yoga,” 3448.

347. Bergen-Cico, Razza, and Timmins, 3450.

pedagogy and subject-matter over-emphasizes what is “out there,” by which he means social narratives, social phenomena, and the “external” world generally.³⁴⁸ He explains that

if we find ourselves blaming ‘society’ for having expelled our interiority from the ‘curriculum’ we are missing the point. . . . Our general approach of coping with the problems of ‘education’ is to look at their ‘social’ symptoms out there and attempt to ‘fix’ them out there. This book suggests that it may be time to forget about ‘education’ and focus on the mind *in here*.³⁴⁹

Ergas recommends implementing mindfulness and contemplative practices into education as a means of balancing the “social curriculum” with the “inner curriculum” of our individual, internal minds: “it is time to open the door of attention inward³⁵⁰ . . . as a practice, mindfulness involves turning our attention inward to explore our first-person experience – our own embodied mind.”³⁵¹ This framing directly reveals a retaining of the dualistic, modern subjectivist paradigm of mind characterized by the polarities of inner-outer, internal-external, self-other, individual-social.

Limits of Mindfulness Based on the Modern Subjectivist Paradigm: Toward Mindful Inquiry

Despite the surge of interest in mindfulness-based interventions as an accessible means of addressing the epidemic of student stress, results from such programs are inconsistent. In a recent systematic and meta-review of both individual studies and other systematic reviews, Leslie R. Rith-Najarian, Maya M. Boustani, and Bruce F. Chorpita discuss that results from multiple systematic reviews of stress reduction and prevention programs remain mixed and ambiguous. In some studies, significant positive effects are observed, but in other cases only moderate effects or

348. Oren Ergas, *Reconstructing ‘Education’ through Mindful Attention: Positioning the Mind at the Center of Curriculum and Pedagogy* (London, UK: Palgrave Macmillan, 2017), vii-26.

349. Ergas, ix.

350. Ergas, *Reconstructing ‘Education’ through Mindful Attention*, xi.

351. Ergas, 14.

ambiguous results obtain.³⁵² Likewise, in the discussion section of a recent randomized control trial study of a yoga and meditation program for college students, Julieta Galante et al. emphasize that while “evidence has shown the efficacy of mindfulness training in improvement of symptoms of common mental disorders, such as anxiety and depression...little robust evidence exists for the effectiveness in prevention of common mental disorders in university students, and no studies have actively monitored adverse effects.”³⁵³

In the past few years, an increasing number of scholars and practitioners has waved a flag of caution in the face of mindfulness hype, admonishing professionals and researchers to give more attention to the potential adverse effects of mindfulness interventions.³⁵⁴ This is partly due to the practices being so simplified for easy adoption across a wide range of secular settings that the core mechanisms such as awareness and attention can actually function to *increase* individuals’ experiences of distress. Merely “attending to” one’s emotional experiences in a “mindful” way is not enough to support and equip a person to effectively discern the causes and nuances of their experiences such that they can productively and safely make use of their increased awareness of what they feel. As Siu-Man Ng et al. explain, “people with high levels of awareness alone, without [skill in] discerning [the complexities of their experience], may be clinging even more to their own . . . distress.”³⁵⁵

As just one example of the dangers of a simplistic, uncritical and universal application of “mindfulness” as a necessarily helpful, supportive practice, recent theoretical, physiological, and

352. Leslie R. Rith-Najarian, Maya M. Boustani, and Bruce F. Chorpita, “A systematic review of prevention programs targeting depression, anxiety, and stress in university students,” *Journal of Affective Disorders* 257 (2019): 568-84.

353. Julieta Galante et al., “A mindfulness-based intervention to increase resilience to stress in university students (the Mindful Student Study): a pragmatic randomised controlled trial,” *Lancet Public Health* 3 (2018): 73.

354. See, e.g., Altinyelken (2019); Burrows (2016); Tarrasch (2015); Van Dam et al. (2018).

355. Siu-man Ng et al., “Awareness Versus Un-Clinging: Which Matters in Mindfulness?” *Contemporary Buddhism* 18, no. 2 (2017), 287.

clinical research has shown that there is quite literally no aspect of mindfulness, and no specific somatic exercise, that always and necessarily has a positive effect on states of emotional disturbance. David Treleaven, a clinical psychologist specializing in trauma and mindfulness, discusses the common assumption within the mindfulness community that the breath is a neutral experience and therefore can be used as an anchor point to help dysregulated people calm and regulate their nervous systems. Research has shown, however, that the breath is not “neutral” – bringing awareness and attention to one’s breathing can in fact *trigger* a trauma response and *increase* the dysregulation of their nervous activity.³⁵⁶

That no single practice or element of human experiencing is “neutral” is a basic, constitutive datum of the paradigm of mind that Dewey helped establish. As structure-determined systems, what can even *be* (i.e., function as) a stimulus or trigger for any given system is in part a function of the system’s structural dynamics at a given point in that system’s ongoing, non-linear diachronic development.³⁵⁷ That what we abstract as a “stimulus” is not a simple, linear cause of what we abstract as an organism’s “response,” but is in fact partly *constituted by* the “response,” was understood by Dewey in the late 1800s (EW5:96-109). Published in 1896, the lessons of Dewey’s “The Reflex Arc Concept in Psychology” have still not been learned by many scholars working in the mind sciences. This is perfectly understandable, however, insofar as the modern subjectivist paradigm of mind is retained; Dewey’s paradigm-shifting insights literally make no sense within the old paradigm.

356. David Treleaven, *Trauma-Sensitive Mindfulness: Practices for Safe and Transformative Healing* (New York: W.W. Norton, 2018).

357. John Brocklesby, “Reconnecting Biology, Social Relations and Epistemology: Systemic Appreciation of Autopoietic Theory,” *International Journal of General Systems* 33, no. 6 (2004): 655-71, DOI: 10.1080/03081070410001728080.

The relevance to the mindfulness movement of this principle that nothing in human experience is neutral is that it shows the impossibility of defining in advance, *a priori*, what mindfulness *is*. In other words, as discussed in chapter one, my claim is that there is no practice or activity that is inherently, intrinsically, by definition, or necessarily “mindful.” This is the pragmatic approach and the core of Dewey’s empirical method. Not even the most common-sense concepts (what Dewey calls “reflective product[s]” (LW1:19)) – such as, e.g., “stimulus” and “response” – can be regarded as unproblematically “given.” This even applies to what are so frequently assumed to be self-evidently “mindful” practices such as meditation, yoga, breathwork, or T'ai chi ch'üan. *Any* specific practice, exercise, or experience might function to help a person feel less stressed *or* more stressed. It is the unique, contingent factors of a *situational context* that conspire to produce the effect(s) of a field of non-linear transactivity, and it is on the basis of such effects, outcomes, or consequences that an experience can be described as manifesting a certain *quality* such as educative quality, religious quality, or mindful quality. I discuss this pragmatic criterion approach to defining mindfulness below.

Responding to Stress via Mindful Inquiry: Reconstructing Social Situations

From the perspective of mindful inquiry, the phenomenon of student stress would be addressed in a significantly different way than what is typical of MBIs today. Namely, “stress” as such would be conceptualized as a quality of social *situations* rather than the subjective-mental experience of *individuals*. To show this, I will discuss how a mindful inquiry approach fundamentally redefines the phenomenon of stress. Two ideas will be offered in this reframing of stress: 1) stress as such is neither good nor bad but simply a defining condition of living systems *qua* living systems; and 2) by analogizing cognition with hunger and metabolism, we can more

readily understand Dewey's claim that the strategy of resolving a problematic situation by merely altering personal states of mind is "pathological" (LW12:110).

The claim to be elaborated here is that mindful inquiry necessarily entails a change in the organization of the social situation if the inquiry is to be "successful," which means that the inquiry process effects some change in the transactivity of the situation (inclusive of what we abstract as "organism(s)" and "environment") such that the situation is re-unified from a disintegrated state to a state of functional integration. On this approach, a situational quality or condition of disintegration can be understood as a system reaching a point of at least potentially harmful stress. As noted above, however, such stress is a quality of the *situation* and not isolated to independent subjects. There may be unique ways that the individuals – as "centers of experience" (LW1:22) – in the situation phenomenologically experience the situational quality of stress/disintegration, but that does not mean that the stressful quality *belongs to* or primarily *originates in* the individual.

Whereas the assumption in most mindfulness literature is that stress is straightforwardly bad and therefore should simply be lowered or reduced, on the mindful inquiry approach stress is a persistent condition of living systems. Here I am defining "stress" as the constitutive, functional *tension* characteristic of process systems who persist in a condition of far-from-thermodynamic equilibrium. It is only when this tension-stress reaches a level that threatens or disrupts the functional integration of a system that it becomes a "problematic" quality of a situation demanding inquiry and reconstruction to restore its healthy operating state, defined as a condition of functionally-integrated wholeness (indeed, "health" etymologically derives from "whole" or "wholeness").

This is, in fact, just the view of Hans Selye, who first systematically studied and theorized stress as an intrinsic aspect of biological systems. Selye defines stress as “the nonspecific response of the body to any demand.”³⁵⁸ There are not “types” of stress, only differentiations according to the eventual *effects* of a condition of stress relevant to contingent conditions and potential uses made of the tensional energy. If the stress functions productively, its effect is called *eustress*; if the stress is dysfunctional, its effect is *distress*. A condition of stress is not intrinsically good nor bad; “all that counts is the intensity of the demand for readjustment or adaptation that it creates.”³⁵⁹

Dewey makes the same point, explaining that “without language, the qualities of organic action that are feelings are pains, pleasures, odors, colors, noises, tones, only potentially and proleptically. With language they are discriminated and identified” (LW1:198). The ineffability of immediate experience means its characteristics are continuous and complementary; qualities such as stable and precarious or eustressful and distressful are unified in an “unanalyzed totality” (LW1:18). Thus, the stressful quality of a problematic situation cannot be simply good *or* bad; it is both potentially, *depending on its consequences when used as means* in the reconstruction – i.e. readjustment or adaptation, as Selye says – of the relevant system. This is the core of the empirical method at the heart of Dewey’s pragmatism. Empirical method begins with the somatically-experienced “inclusive integrity” of immediate experience and then proceeds to investigate “*to what effect*” a conceptual distinction such as *mental* v. *physical* is made: “how the distinguished factors function in the further control and enrichment of...crude but total experience” (LW1:19; emphasis original). In its immediacy, an experiential quality is meaningless and valueless, save proleptically. Through the process of inquiry and naming some

358. Hans Selye, *Stress in Health and Disease* (Boston: Butterworths, 1976), 15.

359. Selye, 14.

aspect of the situation, value judgments – defined as prescribed and anticipated courses of action intended to bring about a desired outcome – are made and responded to via existential reconstruction of a situation.³⁶⁰

To make clear the necessity of situational reconstruction as a response to a condition of stress in a social system and the absurdity of responding via the typical MBI approach of adjusting subjects as individuals to the situation, I will discuss the analogy of hunger. In his discussion of the biological matrix of inquiry, Dewey draws an analogy to an organism's response to an experience of hunger. Prior to being named as such, "hunger" on the level of immediate experience is "a certain quality of the active relationship of organism and environment" (LW1:199). The quality is one of tension, which in living systems constitutes "need," and this tensional quality prompts "search for material that will restore the condition of balance" (LW12:34). This "activity of need-demand-satisfaction" (LW1:196) is the general outline of the contour of processes of inquiry. A situation is experienced as having an indeterminate or problematic quality. Then, reflective thought names the quality as means of indicating what sort of activity would be required to satisfy the need relevant to the uniquely problematic quality of the situation. To name a quality, Dewey says, is to "direct an interaction between an organism and a thing to some object which fulfills the demand or need of the situation" (LW1:199).

To the modern paradigm of mind, analogizing cognition with metabolic processes would likely seem dubious or even absurd. But for the autopoietic view of life and mind, cognition is quite literally modeled as metabolism. As Michel Bitbol and Pier Luigi Luisi assert, "the most

360. Dewey's theory of valuation and naturalistic, biologically-based morality has – like his theory of life-mind – enjoyed an increasing base of support among contemporary research and scholarship in the emerging paradigm of embodied, emergent mind. E.g., Thompson (2014); Christensen and Bickhard (2002); and Allen and Bickhard (2011).

direct form of cognition for a cell is thus metabolism itself, which necessarily implies exchange with the environment and therefore a simultaneous coming to being for the organism and for the environment.”³⁶¹ They likewise state unequivocally: “*a full-blown metabolism is tantamount to cognition.*”³⁶² As all living systems involve some form of metabolism defined as a continuous, dynamic transaction of organism-environment energy, it can be said, as explained by Maturana, that “cognition and the operation of the living system [are] the same thing.”³⁶³

Indeed, Maturana and Varela further claim, “living systems are cognitive systems, and living as a process is a process of cognition. This statement is valid for all organisms, with and without a nervous system.”³⁶⁴ This is significant for properly understanding Dewey’s statement that “the brain and nervous system are primarily organs of action-undergoing; biologically, it can be asserted without contravention that primary experience is of a corresponding type” (LW1:29). In this and related passages, Dewey is trying to explain how his process pragmatic rendering of mind, inquiry, thought, and knowing is fundamentally different from the spectator theory of knowledge and psychological theory of mind characteristic of modern subjectivism. As he explicitly states in the following passage, where the modern and contemporary paradigm understands the brain and nervous system to be “organs of knowing” (or “organs of mind,” as it were) Dewey wants to re-define our physiological systems as structures supporting various sorts of emergent, embodied *activity*:

And experience is not identical with brain action; it is the entire organic agent-patient in all its interaction with the environment, natural and social. The brain is primarily an organ of a certain kind of behavior, not of knowing the world. And to repeat what has already been said, experiencing is just certain modes of interaction, of correlation, of natural objects among which the organism happens, so to say, to be one. It follows with

361. Michel Bitbol and Pier Luigi Luisi, “Autopoiesis With or Without Cognition: Defining Life at Its Edge,” *Journal of the Royal Society Interface* 1, no. 1 (2004), 99.

362. Bitbol and Luisi, 102. Emphasis original.

363. Maturana and Varela, *Autopoiesis and Cognition*, xvi-xvii.

364. Maturana and Varela, 13.

equal force that experience means primarily not knowledge, but ways of doing and suffering. Knowing must be described by discovering what particular mode—qualitatively unique—of doing and suffering it is. (MW10:26)

In other words, all forms of biological operations – regardless of whether we describe them with epistemological terms or physiological terms – are concerned with acting in ways that maintain the autopoietic organization of the unity to which they belong. In short, as Maturana and Varela summarize, “*all doing is knowing, and all knowing is doing.*”³⁶⁵ They explain that they define the “cognitive as *effective action*, an action that will enable a living being to continue its existence in a definite environment as it brings forth its world. Nothing more, nothing less.”³⁶⁶ Dewey comes to the same conclusion through his discussion of the metabolic functions of living systems, in which “at every point and stage...a living organism and its life processes involve a world or nature temporally and spatially ‘external’ to itself but ‘internal’ to its functions” (LW1:212). He continues by explaining that when cognition is viewed as effective action in sustaining life functions, the continuity between life and mind is explained:

The only excuse for reciting such commonplaces is that traditional theories have separated life from nature, mind from organic life, and thereby created mysteries. Restore the connection, and the problem of how a mind can know an external world or even know that there is such a thing, is like the problem of how an animal eats things external to itself... Since both the inanimate and the human environment are involved in the functions of life, it is inevitable, if these functions evolve to the point of thinking and if thinking is naturally serial with biological functions, that it will have as the material of thought, even of its erratic imaginings, the events and connections of this environment. And if the animal succeeds in putting to use any of its thinkings as means of sustaining its functions, those thoughts will have the characters that define knowledge. (LW1:212-13)

The import of the analogy with hunger and metabolism can now be named. When an organism experiences a state of tension constituted by an imbalance of organic-environmental energy distribution and rightly names it “hunger,” the logical response is to eat food. The activity

365. Maturana and Varela, *The Tree of Knowledge*, 26. Emphasis original.

366. Maturana and Varela, 29-30.

of searching for, obtaining, and consuming food literally re-organizes the transactivity of the situation inclusive of organism and environment, where “environment” here pertains to whatever surrounding materials serve the function of supporting the organism’s metabolic needs.³⁶⁷

Suppose a person experiences a quality of stress and names it “hunger.” In response, the person very well could decide to meditate and succeed in lowering their experience of this stressful quality of the situation. However, it would be absurd for the person to think that they have resolved the stressful-problematic quality of the situation simply by adjusting their phenomenological experience of the situation via meditation. At some point, the person would need to actually eat food in order to satisfy their hunger, which process would constitute a successful reconstruction of the situation from a disintegrated to a functionally integrated state.

In like fashion, a student might experience a classroom situation as stressful. The student very well could meditate – or practice yoga, mindful breathing, etc. – and succeed in lowering their experience of this stressful quality of the situation. But if the student does nothing more than this, the response is as logical as meditating to reduce one’s hunger feelings but never eating anything. *At some point*, in some way, some sort of situationally reconstructive activity must be engaged in order for the response process, as inquiry, to successfully close. Obviously, in social situations where the stressful quality pertains to disturbed social transactivity, the resolution would require a change in that transactivity and not merely a change in the “physical” constitution of the situation. For instance, if a student experiences stress because they are being bullied by another student, the bullied student very well could meditate and reduce their

367. As Dewey specifies, in an emergent process pragmatism, “environment” is defined *functionally* in relation to potential *uses* or functions of an organism, where anything that can be named as an “organism” emerges simultaneously with the existence of what can be named “environment.” “There is, of course, a natural world that exists independently of the organism, but this world is *environment* only as it enters directly and indirectly into life-functions. The organism is itself a part of the larger natural world and exists as organism only in active connections with its environment” (LW12:40; emphasis original). “For Nature is an environment only as it is involved in interaction with an organism, or self, or whatever name be used” (LW12:110).

phenomenological experience of that stress. But a complete resolution to the situation would require a change in the *transactivity* of the situation, which is to say it would require reconstructing the relational dynamics between the students such that the bully is no longer acting in a way that contributes to the problematic quality of the situation in the first place.

One qualification should be provided. (Though many more could be relevant.) I am *not* suggesting that there is *no* value in the ability of a mindfulness practice such as meditation to help individuals cope with a stressful situation. In the analogy with hunger, for instance, suppose that a student feels very hungry in class and this experiential quality (which, it should be emphasized, is an existential quality *of the situation* and not isolable to an internal state of the student) is disrupting their ability to concentrate on their work in the class. I am not saying it is *bad* if this student employs mindful breathing to help them manage their feeling of hunger such that they can better focus in the moment, and then go to get food after the class. What I *am* saying is that it would be absurd for the student to *only* meditate in the moment, and then *not* get food after class. In like fashion, it is not simply “bad” for a student to practice mindful breathing to help reduce their experience of the stressful quality of a situation, if they cannot immediately and comprehensively take situational-reconstructive action that would resolve the quality of the situation as a whole. I am only saying that – according to the perspective I have developed here – it would be absurd for the student to *only* practice mindfulness in the moment and never do anything else to address the experience of a stressful situation.

As Michel Foucault says, “my point is not that everything is bad, but that everything is dangerous, which is not exactly the same as bad. If everything is dangerous, then we always have something to do.”³⁶⁸ This more or less conveys the ethics inherent in a process ontological

368. Michel Foucault, *Michel Foucault: Ethics, Subjectivity and Truth*, ed. Paul Rabinow (New York: The New Press, 1997), 256.

pragmatism: every action – including successful inquiries that resolve some portion or phase of an ongoing situation – inherently contributes to the generation of conditions that will inevitably require subsequent reconstructive action in the future. Or, as Dewey says, “there is no rest for the thinker, save in the *process* of thinking” (LW1:98; emphasis original). Somatic practices such as meditation should be taken not as definitive, linear solutions to complex social-situational problems but as functionally supportive of ongoing, collective and dialogic processes of inquiry that aim at the holistic restructuring of unsettled situations into more transactionally integrated situations.

The example of the bully situation is pertinent. I hope that no teacher would respond to a situation of a student experiencing distress as a result of a bully’s behavior by *only* practicing mindfulness and doing nothing to change the behavior of the bully. While these analogies are focused on highly localized situations and experiences, the point I am making is that *in the aggregate*, the situation is essentially the same. That is, to employ mindfulness-based interventions in schools to reduce students’ stress but never doing anything to change the sociocultural-institutional conditions to which that quality of stress belongs is as sensible as meditating to reduce feelings of hunger but never eating.

Concluding Remarks: Mindful Inquiry and the Intelligent Direction of Social Change

It is difficult to indicate with much specificity how mindful inquiry would look in practice, for two reasons inherent to the very notion of inquiry as developed here. First, every instance of inquiry will be to some degree unique and relative to the uniqueness of the situational quality that prompts any given inquiry. As Dewey says, the indeterminate quality that evokes inquiry “is not just uncertainty at large; it is a unique doubtfulness which makes that situation to be just and only the situation it is. It is this unique quality that not only evokes the particular

inquiry engaged in but that exercises control over its special procedures” (LW12:109). Second and relatedly, the activity of living systems – including social groups – is characteristically dynamic, or non-linear, which means it is unpredictable. Thus, a specific procedure or plan for inquiry, in Dewey’s sense, cannot in principle be devised prior to a situation becoming problematic.

Any number of somatic exercises or mindfulness practices might be fruitfully engaged to support what I have called mindful inquiry. Rather than seeking to recommend a specific set of practices as inherently mindful, however, I have endeavored to show how and why a pragmatic, process autopoietic paradigm of life-mind continuity shifts the approach to mindfulness from an engagement of such practices for individual gain to the use of somatic experiencing as a means of supporting a process of social change. I believe that Dewey’s pragmatic, process theory of life-mind enables this, as it treats “the individual/subjective” and “the social” as mutually constitutive, emergent transactive qualities of social situations. On this view, “mindfulness” would be understood as a quality of social systems restored to a condition of functional integration, where such restoration is achieved through the cooperative reconstruction of situations guided by the somatically-experienced qualities of “subjective mind” as the agency of reconstruction of social mind.

As an example of how the mindful inquiry approach can serve social justice education, the case of working with microaggressions in the classroom shows the relevance of Dewey’s ontology of mind to such phenomena. Suppose a white student makes a comment during a class discussion and a student of color experiences this comment as a racial microaggression. The mindful inquiry approach provides a framework for analyzing this situation in such a way that both the social and subjective aspects of the event of “experience of microaggressions” are

emphasized and understood to emerge together in the social situation created by the dialogic encounter between students in that particular classroom environment. Where a highly individualistic approach might define the event “experience of microaggression” as a personal-subjective experience *of* the student of color (i.e., the comment *experienced as* a microaggression is a matter attributable only to the student of color), the mindful inquiry approach would understand the event “experience of microaggression” as a social-dialogic, situational experience in which both white student and student of color are mutually enmeshed.

At the same time, the mindful inquiry approach respects and highlights the *individualized way* in which each student – as a “center of experience,” as Dewey would say – uniquely experiences the problematic situational quality. Perhaps most importantly, the emphasis is placed on the *transactional* – or dialogic, communicative, and relational – nature of social dynamics such as racism. In other words, by defining the “experience of microaggressions” as ultimately an emergent social-situational phenomenon, the mindful inquiry approach implies that a resolution to this situational problem would occur through and as a dialogic, collective reconstruction of the *relational qualities* of the social situation, and not just an adjustment of one or the other individual involved in the discussion. This prevents white students from trying to distance themselves from and avoid responsibility for their entanglement with systemic racism, white privilege, and white supremacy. A reconstructive inquiry in this situation would go beyond the white student merely intellectually understanding *that* their comment was problematic. It would encourage further active engagement around understanding *why* the comment was problematic and *how* systemic racism as a system of shared, intersubjective meanings manifests in and through white students, even without their explicit, reflective awareness. In order to reconstruct the relational racial dynamics of the situation, the white student would need to

understand *their unique, contingent* contribution to that situation rather than just understanding abstract principles about the mechanisms of white supremacy and systemic racism. And making this connection requires the white student to engage with their nondiscursive, somatic experiencing to experience *in the immediate situation* how their embodiment in relation to their colleagues/friends of color serves as a site in and through which the social system of racism is manifesting.

In the end, the mindful inquiry approach is concerned with the effective, dialogic reconstruction of localized social situations. We can recognize that a given instance of a racial microaggression owes some of its features to the widespread, abstract notion of “systemic racism.” But we cannot respond to “systemic racism” in the abstract; we can only respond to the unique ways that such phenomena manifest tangibly in localized, contingent situations. It is at this level of local contingency that reconstructive action can most readily be enacted. Mindful inquiry suggests that in such reconstruction, making explicit the connection between somatic experiencing and conceptual reflection is necessary to effectively reconstruct the situation. This is because in the experience of a microaggression, what is experienced is not white supremacy *qua* white supremacy; what is experienced are the unique, contingent relational qualities emerging within the transactivity of the class discussing race. Such tensional qualities, on this approach, are defined as belonging primarily to the social *situation*, which implies that the site of action and resolution is therefore also the social situation, which necessitates dialogic engagement from all actors contributing to the situation.

This approach mitigates against defining the experience-event-problem of microaggressions as simply an internal, subjective experience of students of color. By emphasizing and supporting the somatic experiencing of such a situation, which is the level of

cognitive engagement that most directly manifests the social-intersubjective nature of mind defined as the system of operative meanings in a situation, white students can better appreciate how their embodied presence in a situation can serve as a site to either support or disrupt the manifestation of system racism. The conceptual analysis of microaggressions can help inform an intellectual understanding of such an occurrence, but this will, by definition, remain somewhat abstract. To connect such conceptual or theoretical understanding to real-world situations, directly experiencing one's embodiment *as* a racialized person is necessary, given that race as a simultaneously individual-social phenomenon is characteristically *embodied*. Whiteness *qua* whiteness is never experienced directly and purely, as "whiteness *qua* whiteness" is an abstract term or "reflective product," as Dewey says. *What* is experienced in a situation of a racial microaggression is the unique, contingent *way* that white supremacy tangibly manifests in and through the relational (i.e. transactive) dynamics between students whose racialized embodiment differentially positions them in relation to concentrations and absences of power such that power, privilege, and other forms of social capital are disproportionately accorded to white bodies at the expense of students of color.

This imbalance in the flowing and concentration of power through a social situation can be understood through the mindful inquiry approach as constituting a problematic – because unsettled, disintegrated – quality in need of collective, dialogic reconstructive action. Such action, guided and informed by the direct, somatic experiencing of the social-qualitative nature of the situation, what mindful inquiry encourages and supports. It is difficult to specify, in the abstract, *how* exactly such reconstructive action would look in a given situation, since without literally being in the situation, I could not possibly know all the significant factors and conditions that would influence an appropriate course of restorative effort. The situation might demand that

students of color and white students break off into separate discussion groups before then dialoguing as a whole class as a means of determining how best to respond to the situation. But depending on the contingent factors of the situation, it might be best for all students to remain part of a collective discussion. It might make most sense for the teacher to lead the discussion, but in other cases it might be most pedagogically effective for the teacher to let the students lead. Effective reconstruction of the situation might be possible simply within the classroom environment. But, depending on the content and nature of the microaggression, action at the level of a department, school, or institution might also be called for. Is this the first time the white student has said something experienced as a microaggression? Or is this a pattern with the student? These and countless other potential factors constitute the contingent characteristics of each individualized situation and cannot be adequately determined and analyzed in advance, or *a priori*, of a situation.

Mindful inquiry provides a theoretical and practical framework for understanding why and how such situations can best be reconstructed by employing somatic practices to bring awareness not to the purely internal-individual-personal-subjective nature of social-situational experience, but to the dynamic *relational* nature of social phenomena such as the racialized distribution of power and privilege. By emphasizing the emergent, relational nature of such phenomena, mindful inquiry encourages a *collective*, dialogic means of reconstructing the relational-communicative nature of the social situation. The McMIndful approach, conversely, with its individual-internal understanding of mind, might encourage a response that enables students to subjectively feel better about the occurrence but not actually *do* anything to ensure that such microaggressions do not continue manifesting.

The process ontology of Dewey's situationism, I believe, is necessary for understanding Dewey's effort to reconstruct philosophy into an embodied social practice. For instance, the perspective enabled by this paradigm shift helps to show how Dewey's statements about the most urgent intellectual and practical challenges of society coincide. As mentioned in the introduction, Dewey says that the most urgent intellectual task of our time, the "intelligent human control of social change," (LW5:363) "can only be done by individual men and women...developed into full possession of all their potentialities" (LW5:297). Tangibly, Dewey says that "the question of the integration of mind-body in action is the most practical of all questions we can ask of our civilization. It is not just a speculative question; it is a demand" (LW3:29-30). These two concerns, I suggest, run together and are best understood and engaged through the account of "mindful inquiry" developed here.

The notion of mindful inquiry provides a unique perspective on what Dewey means by developing individuals into the fullness of their potentialities. Given the interpretation I have provided above, "individuals" should not be read as a "subject" *with* a mind in the modern subjectivist sense. As Dewey explains in *Logic*, "the theory [modern dualistic subjectivism] criticized holds that there is a cognitive subject antecedent to and independent of inquiry, a subject which is inherently a knowing being" (LW12:518). Thus, "potentialities" should not be read as individual abilities contained within and belonging exclusively to individual subjects. This is what has led to the "mindful brain" approach to meditation discussed in chapter one. Instead, on the approach offered here, developing the full potentialities of individuals *as functional components of autopoietically-organized social systems* would entail engaging in socially cooperative, socially reconstructive activity rooted in and guided by somatic

experiencing. This is ultimately a collective, dialogic, democratic practice that would, ideally, function to support and develop the inquiry process as an emergent social function.

In this dissertation, I have discussed what is needed to support Dewey's reconstruction of philosophy into a critical, embodied practice of intelligent social change and how the mindfulness movement shares this goal of addressing social issues through education. The key shift needed is a complete turn from the modern subjectivist view of life-mind and an embrace of the emerging paradigm of the life-mind continuity thesis. This shift entails a change in scope and application of mindfulness correlating to the change in definition of mind between these two paradigms. In the modern paradigm, mind is an individual-level, subjective mental phenomenon; thus, the appropriate site of MBIs is the individual, as is characteristic of the neoliberal, "mindful brain" approach to mindfulness. In Dewey's process autopoietic theory of mind, mind is a transactive function of self-organizing social systems; thus, from this perspective, "mindfulness" is a quality obtaining on the *situational* level of social systems defined as autopoietic unities.

Taking Dewey's approach to constructing a philosophy of education, which involves asking after the assumed premises underlying a contemporary debate and redefining the relevant phenomena according to a "new order of conceptions leading to new modes of practice," (LW13:3) I have here suggested that the "proper frame of reference" necessary for a critical, socially-engaged mindfulness is the naturalistic continuity of life-mind, explained through a process autopoietic ontology. Adopting this framework shifts the focus of mindfulness from "ready-made...self-sufficing individual[s]" (LW1:134) to social *situations* as the operative site of social change. This encourages a re-framing of the epidemic of student stress to an epidemic of school and social stress, which in turn moves the emphasis away from individual students' lack of coping skills and toward the environing conditions demanding coping in the first place.

Again, this is not to say that self-regulation and coping skills *as such* are bad or should not be improved. In given situations, improving resilience and coping skills is perfectly sensible and desirable. In other situations, however, much more should be done. As the example of student bullying above illustrates, it would be absurd for critical, social justice-oriented educators to recommend that the complete solution to the stress experienced by a bullied student is for that student to simply meditate as a means of increasing their ability to cope with the bully. There is value in developing self-resilience skills and abilities, but it is the *social context* in which such practices are engaged that ultimately determines their value, utility, and effectiveness. What I am suggesting is that MBIs as a widespread solution to social-level phenomena like the stress epidemic must be critically employed and, more specifically, that the premises concerning mind, the individual, the social, and emotional-affective experience underlying mindfulness programs must be understood and revised lest such efforts – in the aggregate – function to increase the dis-ease of an increasingly stressful world in the attempt to cure that dis-ease.

It is a shift to focusing on the level of whole social situations that Dewey's view requires. While some scholars have started to encourage whole-school reforms³⁶⁹ and more proponents of mindfulness have addressed the social dimension and context of MBIs,³⁷⁰ there remains the possibility of retaining the modern subjectivist paradigm and simply shifting the emphasis to the other side of the duality. Namely, over-emphasizing the social to the neglect of individual experiencing. Just as much work in the mind sciences tries to overcome Cartesian dualism by simply dispensing with one side of the picture and reducing mind to matter, so the easy way to overcome the intractable issues with the perennial individual-social debates is to over-emphasize

369. See, e.g., the essays in Purser, Forbes, and Burke, eds. (2016) and in Schonert-Reichl and Roeser, eds. (2016).

370. David Forbes, *Mindfulness and Its Discontents: Education, Self, and Social Transformation* (Black Point, Manitoba: Fernwood, 2019).

one and reduce it to the other. For example, as Dewey discusses, the basis of liberalism is positing a set of self-sufficing individuals who come together willfully to create a social contract (LW1:168-70). On the other hand, there is the strategy of saying that “the individual” is not really a substantive thing and is ultimately reducible to or absorbed by the collective.

Dewey’s emergent process ontology rejects both these views, just as he rejects the entire framework that assumes a duality between mind-body. What the modern paradigm describes variously as “mental activity” and “physical activity,” on Dewey’s view, is simply “human life” as a “unified wholeness of operation” (LW3:27). In like manner, what the modern paradigm separates as “the individual” and “the social,” on Dewey’s view, is a functionally integrated unity of operation. This is the importance of stressing that for Dewey, life is “an integration.” What are traditionally abstracted as “individual” and “social” – or organism and environment (LW12:30-40) – are functional components of an integrated social-existential situation. “Mindfulness,” or the literal fullness of mind, on this perspective is a quality obtaining on the level of an autopoietically-unified social situation when that system *functions as* an integration according to the principles of autopoiesis, process ontology, and the dynamics of self-organizing systems. When the functionally integrated unity of a social system is disrupted, a situational condition of “dis-ease” obtains. Inquiry is the process of reconstructing the organizational dynamics of the holistic social situation (Dewey’s definition of “mind”) such that the *situation* returns to a functionally integrated condition of operation.

Employing here Dewey’s pragmatic criterion for determining the quality of any given activity or experience, on this approach to mind, any practice that functions to reconstruct a situation from a disintegrated to an integrated condition – thereby restoring the “fullness” of mind; i.e. employing subjective experience/subjective mind as means in restoring to its

characteristic state the holistic organizational dynamics of a social system as autopoietic unity, or *redintegration* (LW12:40) – can be said to have “mindful quality.” Mindful inquiry, then, is holistic, socially attuned communicative-cooperative “mind-body” activity that engages and employs somatic experiencing as means in the reconstruction of social situations. Crucially, as I have endeavored to show by explicating Dewey’s process ontology, this requires literal change in the environing social conditions rather than simply improving individuals’ ability to cope with such conditions. As Dewey summarizes, “restoration of integration can be effected, in one case as in the other, only by operations which actually modify existing conditions, not by merely ‘mental’ processes” (LW12:218). Ultimately, the full development and application of Dewey’s reconstruction of inquiry would require substantive changes to the organization, structure, and functions of social institutions such as schools and workplaces, as discussed below.

Directions for Future Research and Application

These “concluding” remarks, I hope, will be taken not as an attempt at an absolute, final settlement of the issues discussed herein but in the naturalistic, pragmatic sense of a Deweyan “end,” which is to say an end existing simultaneously as a new beginning. As with all concepts in Dewey’s pragmatism, beginnings and endings are continuous and complementary:

To insist that nature is an affair of beginnings is to assert that there is no one single and all-at-once beginning of everything. ...Clearly the fact and idea of beginning is neutral, not eulogistic; temporal, not absolute. And since wherever one thing begins something else ends, what is true of beginnings is true of endings. ...To minds inured to the eulogistic connotation of ends, such a neutral interpretation of the meaning of ends as has just been set forth may seem to make the doctrine of ends a matter of indifference. ...In the degree, however, in which the mind is weaned from partisan and ego-centric interest, acknowledgement of nature as a scene of incessant beginnings and endings, presents itself as the source of philosophic enlightenment. It enables thought to apprehend causal mechanisms and temporal finalities as phases of the same natural processes, instead of as competitors where the gain of one is the loss of the other. (LW1:83)

In this spirit, I offer these summarizing thoughts as a closure to the present inquiry as much as a hoped-for beginning to further inquiries that will take up the lines of thought here as prompts to even more effectively, creatively, and critically embody and enact a Deweyan approach to inquiry in other contexts. Such taking up the task of forever and continuously advancing inquiry, after all, is ultimately what characterizes Deweyan inquiry:

Because we live in a world in process, the future, although continuous with the past, is not its bare repetition. The principle applies with peculiar force to inquiry about inquiry, including, needless to say, the inquiry presented in this treatise. The very words which must be used are words that have had their meanings fixed in the past to express ideas that are unlike those which they must now convey if they are to express what is intended. To those who are naturalistically inclined, the attendant ‘fallibility’ will be but a spur to do better the work which this volume attempts to do. The present volume is an approach not a closed treatise. The aim it hopes to fulfil (sic) is that of being a sufficiently coherent and systematic approach to move others to undertake the long cooperative work (never-ending in any case as long as inquiry continues) needed to test and fill in the framework which is outlined in this book. (LW12:46-47)

This “never-ending” process of continually beginning inquiry anew is coincident with life itself, defined autopoietically, and it is this continuity of life, mind and inquiry that I have endeavored to show in the present inquiry. The practical upshot is that my effort to maintain and advance Deweyan inquiry can be said to be successful insofar as what I have written prompts others to take up new inquiries in their own contingent situations. With such hopes, I offer a few suggestions for scholars interested in engaging the wide array of phenomena related to the life-mind continuity thesis.

As discussed in the introduction and in chapter two, Dewey’s most inclusive and radical vision for philosophy was to reconstruct the practice from a specialist’s discourse and independent academic discipline into an embodied, practical, critical social inquiry. This would manifest as the practice of philosophy serving as a “generalized medium of intercommunication, of mutual criticism through all-around translation from one separated region of experience into

another. Thus philosophy as a critical organ becomes in effect a messenger, a liaison officer, making reciprocally intelligent voices speaking provincial tongues, and thereby enlarging as well as rectifying the meanings with which they are charged” (LW1:306). In this spirit, I offer a few examples of how the approach to Deweyan inquiry in this dissertation can be relevant to scholars and practitioners in a range of contexts and pursuits.

A primary example of this naturalistic, pragmatic reconstruction of philosophy is the emerging transdisciplinary project of *neuropragmatism*.³⁷¹ Neuropragmatism seeks to integrate the theoretical and empirical insights of the neurosciences, cognitive sciences, and social sciences with a naturalistic, bioevolutionary-based pragmatism in such a way that the philosophical and empirical study of life and mind is critically unified. While this approach shows great promise, it is still a very under-developed field. As the initiator of the project, Tibor Solymosi, has said, “the potentials for neurophilosophical pragmatism have not yet been articulated.”³⁷²

When approached as an effort to elucidate some of the transdisciplinary, practical and common experiences of people in everyday life (i.e., as Dewey’s call for philosophy becoming a social science dealing with the “macroscopic...the gross and complex” phenomena that characterize social activity [LW5:174-77]), Dewey’s theory of emergent mind and life-mind continuity thesis can be seen to have direct relevance to a wide range of social phenomena currently addressed by scholars from many fields of study. Among many others, here are just a few examples of recent work utilizing Dewey and engaging questions relevant to the life-mind continuity thesis:

371. Tibor Solymosi and John R. Shook, “Neuropragmatism: A Neurophilosophical Manifesto,” *European Journal of Pragmatism and American Philosophy* 1 (2013): 212–34.

372. Tibor Solymosi, “Neuropragmatism, Old and New,” *Phenomenological Cognitive Science* 10 (2011): 347–68.

- Pursuits in creative arts, art pedagogy, and art therapy (Rappaport 2008; Verducci 2019)
- Empirical, theoretical, and clinical research on autonomic and neurophysiological functioning, e.g. traumatic stress and emotional regulation (Porges 2011)
- The philosophy of biology and science generally (Godfrey-Smith 2016; Tschaepe 2011)
- Body pedagogics and pedagogies of kinesiology (Andersson and Garrison 2016)
- Democracy and education, radical democracy, and creative democracy (Barnette and Bridge 2013; Browne 2009; Lake 2017; Reich, Garrison and Neubert 2016)
- Edusemiotics and embodied pedagogies (Semetsky 2014)
- Critical feminism (Berila 2020; Epstein 2014; Fischer 2010; Seigfried 1991, 1993, 1996, 1999, 2000, 2001, 2002; Sullivan 2001)
- Indigenous studies and the history of American philosophy (Wilshire 2000)
- Critical theory (Frega 2014)
- Social justice education and pedagogy (Berila 2016, 2020; Nelsen 2016; Rendón 2014; Ríos 2019)

That Dewey has been engaged by scholars from such a diverse range of disciplines to address so many different theoretical and practical questions attests to his claim that notions about knowing and acting, “about the nature of the real world, about the nature of the mind and its organs of knowing, are completely bound up with one another, and their consequences ramify into practically all important ideas entertained upon any philosophic question” (LW4:19). Such questions, ultimately, are “too thoroughly entangled with fundamental beliefs and ideas in all sorts of fields” to be treated in isolation (LW4:20).

In recent years, an increasing number of critical scholars and educators has contributed to such a transdisciplinary integration of theory and practice, incorporating scholarship from such fields as mindfulness, social justice education, critical theories, and the social sciences. Many examples could be given, but I will name just two exemplary cases: *Radical Dharma: Talking Race, Love and Liberation*³⁷³ and *Teaching With Tenderness: Toward an Embodied Practice*.³⁷⁴

373. Rev angel Kyodo Williams, Lama Rod Owens, and Jasmine Syedullah, *Radical Dharma: Talking Race, Love, and Liberation* (Berkeley, CA: North Atlantic Books, 2016).

374. Becky Thompson, *Teaching with Tenderness: Toward an Embodied Practice* (Urbana, IL: University of Illinois Press, 2017).

Written by the Reverend angel Kyodo williams (an ordained Zen Buddhist priest, one of only two black women Zen Senseis), Lama Rod Owens (Tibetan Buddhist teacher, professor and activist), and Jasmine Syedullah (professor of sociology with specialties in feminist studies, the history of consciousness, and Buddhist philosophy), *Radical Dharma*

brings together the Black prophetic tradition and the wisdom of the Dharma. Bridging the world of spirit and activism, [the authors] urge a compassionate response to the systemic, state-sanctioned violence and oppression that has persisted against black people since the slave era. With national attention focused on the recent killings of unarmed black citizens and the response of the Black-centered liberation groups such as Black Lives Matter, *Radical Dharma* demonstrates how social transformation and personal, spiritual liberation must be articulated and inextricably linked.³⁷⁵

In a similar yet distinct vein, professor of sociology Becky Thompson, in *Teaching with Tenderness*, engages contemplative and somatic practices as means of compassionately yet critically addressing social injustices in the classroom. Blending women-of-color theories, multiracial feminist pedagogy, contemplative pedagogy and trauma studies, Thompson develops a “pedagogy of tenderness” that enables a sensitive yet honest engagement with students’ embodiment of their personal and social identities as they intersect with the complex power dynamics of a diverse yet oppressive social milieu.

As countless scholars have discussed from many angles, embodied experience is a highly politicized matter for many students, especially students identifying with marginalized, oppressed, and/or erased communities, whether concerning race, gender and sexuality, dis/ability, or religiosity and spirituality. Yet, to simply ignore this embodied dimension of experience, cognition, and relationality in education because it is complex, sensitive, and potentially risky can ironically function to perpetuate the marginalization of “non-standard”

375. “Radical Dharma: Talking Race, Love, and Liberation,” Penguin Random House, accessed May 31, 2020, <https://www.penguinrandomhouse.com/books/547708/radical-dharma-by-rev-angel-kyodo-williams-lama-rod-owens-and-jasmine-syedullah/>.

bodies (and, thereby, following my analysis here, minds) and the re-centering of the status quo that comforts mainstream and dominant forms of embodiment, which paradoxically can be harmful for everyone, even those students who identify with such norms and dominant identities/forms of embodiment (and correlate forms of cognition, relationality, and communication).

One's embodiment is simultaneously a site of vulnerability and power; personal intimacy and the manifestation of systemic sociopolitical dynamics. Thus, a nuanced theory of mind-body, cognition, affect and inquiry that respects such complexities, such as Dewey's, is necessary to engage this dimension of education critically yet compassionately and constructively. Works such as *Radical Dharma* and *Teaching with Tenderness* help to navigate these choppy waters, critically and carefully utilizing mindfulness practices, somatic exercises, and contemplative pedagogy to engage the multidimensional phenomenon of embodiment as a central component in educational experience on all levels (relational, curricular, cognitive, ethical, cultural, linguistic, accessibility, learning styles, etc.) in such a way as to maximize inclusion and social and personal relevance of social justice education especially and education generally.

In addition to the more localized implications for inquiry and pedagogy such as the need for somatic experiencing in all forms of inquiry, Dewey's reconstruction of philosophy also prescribes significant metaphilosophical implications. Just one example of this concerns the arrangement of research disciplines, fields, and curricula in educational systems. In order for the practice of mindful inquiry – which is to say, “the integration of mind-body in action” – to be fully actualized, the very structure and organization of social institutions must be correlatively modified. Dewey makes plain his desire to reconstruct human inquiry as such at the end of his essay “Body and Mind.” There, he says that “I close with suggesting the imperative need of such

an integration in the art of education, an integration which can become real only as the scientific man, the philosopher, the physician and psychiatrist cooperate” (LW3:38). I take “the art of education” here to mean not just formal schooling but, ultimately, life as such. I am thinking of Dewey’s pragmatic criterion of “educative experience” based on his naturalistic theory of experience as biological growth, and the operations of learning and inquiry as fully continuous with biological function. *Any* experience in life can have educational quality if it functions to engender and maintain the conditions conducive to further growth.

Unfortunately, current social conditions frequently fragment inquiries into highly specialized types contained within specialized institutions. Educationally, this manifests as conflating formal schooling with education as such. Moreover, experience within schools is further confined to highly specialized areas of study and research, namely fields and disciplines that, in most cases, are still premised on the false division of mind from body, theory from practice, and thought from action. As Dewey says,

The division [of mind from body, physical from mental] has affected every subject of study, every method of instruction and discipline. More than anything else it explains the separation of theory and practice, of thought and action. The result is a so-called cultural education which tends to be academic and pedantic, in any case aloof from the concerns of life, and an industrial and manual education which at best gives command of tools and means without intelligent grasp of purposes and ends. The consequences of this divided education are writ large in the state of our civilization. (LW3:39)

Progress in reintegrating mind and body in action has been made, Dewey acknowledges, but much more is needed. Ultimately, such reintegration must be established not just within or on the level of individuals but also across social and institutional arrangements at large. Dewey concludes his essay suggesting that education naturalistically defined, as inclusive of an inquiry-based life process incorporating all aspects of social activity, can function as the unifying “art” of intelligent social inquiry through which the continuity of mind-body-life can be manifested. As

was true in Dewey's day, I offer the same assessment for the contemporary challenge of engaging education as a means of directing a critical, intelligent social inquiry that can be truly called "mindful" in its function of reintegrating otherwise fragmented social situations such as are characteristic of the day:

The forces are still powerful that make for centrifugal and divisive education. And the chief of these is, let it be repeated, the separation of mind and body which is incarnated in religion, morals and business as well as in science and philosophy. The full realization of the integration of mind and body in action waits upon the reunion of philosophy and science in art, above all in the supreme art, the art of education. (LW3:40)

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Curriculum Vitae

David J. Wolken
djwolken@syr.edu

EDUCATION

- Ph.D. – Cultural Foundations of Education (*Philosophy of Education*) 2020
Syracuse University
- M.S. – Cultural Foundations of Education (*Philosophy of Education*) 2018
Syracuse University
- B.A. – Psychology 2010
University of Northern Colorado

TEACHING EXPERIENCE

- CFE/WGS 444: Schooling and Diversity* (Cultural Foundations of Education/Women’s and Gender Studies; Syracuse University)
- Sole instructor and syllabus creator: Fall 2015
- EDU 310/610: The American School* (School of Education; Syracuse University)
- Teaching assistant, lecturer, and discussion section leader: Spring 2016
- Engaging Racial Justice in a Context of White Supremacy* (First Unitarian Society of Denver)
- Course creator, syllabus designer, sole instructor: January 2017-May 2017

PUBLICATIONS

- Wolken, D. (2017) “Thinking in the Gap: Hannah Arendt and the Prospects for a Postsecular Philosophy of Education,” in *Philosophy of Education Society Yearbook*, ed. Natasha Levinson.
- _____. (2016) “Toward a Pedagogy of the Absurd: Constitutive Ambiguity, Tension, and the Postmodern Academy.” *Journal of Inquiry and Action in Education* (7)1.
- _____. (2015) Review of *Rethinking Knowledge Within Higher Education: Adorno and Social Justice* by Jan McArthur. *Education Review*, 22.
- _____. (2014) Review of *Dangerous Counterstories in the Corporate Academy* by Daniels, Emily A. & Porfilio, Brad J. *Education Review*, 16.

PROFESSIONAL EXPERIENCE

Teaching Faculty and Mental Health Consultant <i>Sundara Yoga Therapy, LLC</i> <i>Austin, TX</i>	2019-current
Owner, Therapist <i>Cedarwood Counseling, LLC</i> <i>Denver, CO</i>	2019-2020
Graduate Academic Advisor <i>Wisdom Traditions and Contemplative Education Departments</i> <i>Naropa University; Boulder, CO</i>	2017-2018
Teaching Assistant; Instructor; Discussion Section Leader <i>Cultural Foundations of Education; Women's and Gender Studies</i> <i>Syracuse University</i>	2014-2016
Manuscript Peer-Reviewer <i>Journal of Teacher Education: The Journal of Policy, Practice, and Research in Teacher Education</i>	2015-2016
<i>Policy Futures in Education</i>	2016-2017
Associate Editor <i>The SoJo Journal: Educational Foundations and Social Justice Education</i> Information Age Publishing (http://www.infoagepub.com/the-sojo-journal.html)	2014-2015
Conference Program Committee <i>7th Annual Conference on Equity and Social Justice</i> <i>Syracuse University</i>	Spring 2014
Instructional Assistant - Student Athlete Academic Support <i>Syracuse University</i>	2013
Academic Advisor <i>Westwood College; Westminster, CO</i>	2011-2012
Resident Assistant <i>University of Northern Colorado; Greeley, CO</i>	2009
Peer Advocate <i>Assault Survivors Advocacy Program – University of Northern Colorado</i>	2009-2010
Adventure Programming Staff/Camp Counselor <i>Camp Carol Joy Holling</i> <i>Ashland, NE</i>	2009-2013

AWARDS, HONORS, GRANTS

Contemplative Social Justice Scholarship – Association for Contemplative Mind in Higher Education, Annual Conference (Center for Contemplative Mind in Society)	2019
University Doctoral Research Fellowship - Syracuse University	2013-2017
<i>Summa cum laude</i> - University of Northern Colorado, B.A.	2010
Syracuse University Graduate School Programming Grant	2015-2016

PROFESSIONAL MEMBERSHIPS

Philosophy of Education Society
(<https://www.philosophyofeducation.org/>)

Association for Contemplative Mind in Higher Education
(<http://www.contemplativemind.org/programs/acmhe>)

CONFERENCE PRESENTATIONS

Thinking in the Gap: Hannah Arendt and the Prospects for a Postsecular Philosophy of Education. Philosophy of Education Society – Annual Meeting. Toronto, ON. Mar. 17-21, 2016.

The (Dangers and) Necessity of Loving Whiteness to Death: Dominant v. Critical Humanizing Love in the Antiracist Classroom. American Educational Studies Association – Annual Conference. San Antonio, TX. Nov. 11-15, 2015.

Contemplative Inquiry in the “Post-Secular” Academy: The Religious Secularity of American Higher Education. Sacred Literature, Secular Religion: A Conference on Cultural Practices. Syracuse, NY. Oct. 1-3, 2015.

Faculty Respondent for Panel on Vocation and Higher Education. Prophetic Voice and Making Peace: Theological Reflection on United Methodist Collegiate Ministries – Special Conference of the United Methodist General Board of Higher Education and Ministry. Syracuse, NY. Aug. 14, 2015.

The Mass Media and Education Reform: Simulations of Experience and Dialogue. American Educational Research Association – Annual Conference. Chicago, IL. April 15-21, 2015.
A Critical Pedagogy of the Absurd: Rebellion, (Im)potential, and Social Transformation. 8th Annual Conference on Equity and Social Justice, March 7, 2015.

Liberal Education in the University: Simulation, Commodification, and Commitment. American Educational Studies Association – Annual Conference, Oct. 29-Nov. 2, 2014.

Simulations and Imposters: Dispelling the Masked Messages of Corporate 'Education Reform.'
American Educational Studies Association – Annual Conference, Oct. 29-Nov. 2, 2014.

Resisting the Neoliberal University: A Place for Chaos and Neo-existentialism?
7th Annual Conference on Equity and Social Justice, March 1, 2014.

*Pedagogical Perplexity, Ontological Suspension, and the Chaotic University: Subverting
Reductionistic Instrumentalism through Negative Capability*
Critical Theories in the 21st Century: A Conference on Transformative Pedagogies, Nov. 16,
2013.

*Perplexity, Ontological Suspension, and Anxiety: The Productive Tension of a Pessimistic
Pedagogy of Critical Hope*
American Education Studies Association – Annual Conference, Oct. 30-Nov. 3, 2013.

EXTRACURRICULAR UNIVERSITY SERVICE

Syracuse University

SU Collaborative on Contemplative Pedagogy & Inquiry 2014-2018

Graduate Student Organization (GSO); University Senator 2012-2013
Chair: Graduate Employment Issues Committee
Member: Expanded Campus Safety Committee and Library Committee

InterFaith Student Council 2012-2013
Student Leadership Team

University of Northern Colorado

Psi Chi – Psychology Honor Society 2009-2010

Student Leadership Team – Director 2009-2010
Christ Community Church – College Ministry

Psychology of Religion Discussion Group Leader 2010
Psychology of Religion Senior Seminar

Rock Climbing Club Vice-President 2009-2010