



Article

The Contemplative Approach of Indian Philosophies & Science Education: A Concentration on the Buddhist Principle of *Pratityasamutpada*

Raaghav Pandya 🕞

Science Education, Columbia University, New York, NY 10027, USA; raaghav.pandya@tc.columbia.edu

Abstract: Contemporary science pedagogy, especially at the secondary level, seeks to emphasize Dewey's idea of science as a method. More specifically, factors of the nature of science that highlight inquiry-based learning have been popularized and applied in science curricula and classrooms. Simultaneously, the West has experienced exponential growth in studios, seminars, and interventions involving mindfulness, yoga, and Eastern practices. Whether it be for physical health or corporate productivity, these practices have entered the contemporary culture, often with an aspect of cultural appropriation. While these practices have undoubtedly proven to improve performance and control anxiety among young people, this paper argues that adopting the paradigm and premise of philosophies such as yoga, Vedanta, and Buddhism alter student understanding of science and their interaction with the world. This paper will do so by presenting science as an experience of inquiry by the subject, as explained by Dewey, Spencer, and Kuhn. This paper will contrast the approach of these contemplative schools to Cartesian dualism, particularly concerning the idea of subjective awareness. By doing so, this paper will present how a pedagogy based on the paradigm and approach of yoga and mindfulness (not just its meditation practices) can influence students' experience of oneness with others and their environment, science as inquiry, and being a contributing member of a community. More specifically, this paradigm application allows for a student's experience of first-person inquiry and awareness that leads to an interconnectedness (pratityasamutpada) and citta vrtti nirodha (stilling of the fluctuating states of mind). In a time when students are heavily engaged in a technology-dependent, pandemic learning environment, this shift in science pedagogy offers an alternative approach that improves student understanding of the role of empathy and sustenance in science.

Keywords: inquiry-based learning; subjectivity; pratityasamutpada; yoga; Buddhism



Citation: Pandya, Raaghav. 2023. The Contemplative Approach of Indian Philosophies & Science Education: A Concentration on the Buddhist Principle of *Pratityasamutpada*. *Religions* 14: 54. https://doi.org/10.3390/re114010054

Academic Editor: Deborah Orr

Received: 18 October 2022 Revised: 20 December 2022 Accepted: 26 December 2022 Published: 28 December 2022



Copyright: © 2022 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

1. The Contemplative Approach of Yoga & Mindfulness

The last two decades present a tremendous increase in the number of yoga and mindfulness seminars, programs, and interventions, particularly in the fields of science and education (Ergas 2019). Although many of these exercises lead to treatments of mental health issues, depression, and physiological illnesses, they are often stripped of their philosophical intention and pedagogical method, and consequently, commodified (Sellman and Buttarazzi 2020). Eastern schools of thought such as yoga, Vedanta, and Buddhist mindfulness are often called wisdom or contemplative traditions, although wisdom traditions can represent any indigenous practice of peoples such as the Aborigines, Native Americans, and even West African communities that seek to bring about awareness, unity, and conscious living (Ergas 2019, p. 251). This paper will concentrate on the pedagogical framework of Indic traditions alone, such as yoga and Vedanta, with a primary focus on Buddhist mindfulness.

Contemplative approaches, as defined by Ergas (2019, pp. 252–57), emphasize the inner life rather than the outer life. In other words, whether it is through meditation,

Religions 2023, 14, 54 2 of 9

introspection activities, or empathy practices, these schools of thought argue that when one learns to be aware of emotions, cognition, and surroundings, the individual experiences a critical perspective towards one's beliefs and a sense of connectedness with others. Most Indian philosophies, such as yoga and Vedanta, although varying in their ontological arguments and metaphysics, present a clear purpose to their pedagogy: *yogah cittavrtti nirodha* (yoga is the stilling of the fluctuating states of the mind) (Mookerji 1947; Roy 2009, pp. 186–90). The purpose of schools such as yoga, therefore, is for the individual to still the mind to experience an equanimity, not just to improve oxygen or heart rate (Sellman and Buttarazzi 2020, pp. 62–64). On the contrary, while Buddhist mindfulness also seeks to achieve a level of equanimity and awareness, the approach is distinct. It is therefore important to briefly discuss the philosophical framework within which the pedagogies of the East have been traditionally framed.

2. Interconnectedness in Buddhism—Pratityasamutpada & Sunyata

More specifically, Buddhism highlights a principle known as pratityasamutpada (dependent arising), an understanding that all things, whether physical or mental, are ultimately all connected. In other words, all that we experience in the material world has only a dependent ontological existence—things exist because of something else's existence and cease to exist because that something else ceased to exist. However, where does this principle draw its philosophical root? The idea of sunyata—a Sanskrit term often translated as emptiness. Garfield (2002), when evaluating what emptiness represents, argued that it expresses a lack of essence. This is in contrast to the common nihilistic understanding of sunyata as nothingness. Nothingness often provides students and readers with the notion that everything is meaningless and therefore, moral decisions have no real truth value. However, as Buddhist philosophers clarify, sunyata is not a nihilistic path to amorality, but rather a root of compassion (Varela 1999, pp. 67-69). As Varela described this principle in the Mahayana tradition of Buddhism, "Sunyata, the loss of a fixed reference point or ground in either self, other, or relationship ... is said to be inseparable from compassion" (Varela 1999, p. 68). Therefore, realizing the emptiness of all things, objects, and thoughts, provides a paradigm of interconnectedness, and thus, the practitioner may act out of empathy. Rather, Garfield discussed the relation between the emptiness explained by Nagarjuna and the essence explained in yogic and Vedantic traditions. While the latter provides an argument and process to experience a svabhava (essence), the former argues that no such self exists. Consequently, nothing has a permanent existence or fundamental nature, and therefore, all things are causally related. This means that something is empty when it lacks a permanent, stable core of existence (Orr 2004). This implies that nothing, as a result, has an independent essence that is not reliant on anything else for its existence. This presents the Buddhist principle of dependent arising. Although the yoga and Vedanta schools also argued that material substance, including the mind, is causally related, they presented the idea that there exists a self with a permanent essence (one's own nature). Simply put, sunyata is the lack of an essential self. As philosophers such as Nagarjuna highlighted, the Buddhist paradigm holds that all material and immaterial things are ultimately dependent, and the recognition and experience of this impermanence are what traditional thinkers have called *nirvana* (Garfield 2002).

The Buddhist tradition, and thereby its pedagogy, present this view of reality in line with the Eastern rationale of reductional analysis of happiness. The First Noble Truth states that all is suffering, and by this, Dorjee argued, the Buddhist teachers are highlighting the human obsession and consumption of physical and mental things as the root of happiness (Dorjee 2013). However, this suffering is overcome, according to teachers, such as Nagarjuna, when one experiences their impermanence and causally related nature with the rest of the universe. This is the true root of lasting happiness. Nirvana is, therefore, the experience of the interconnectedness of all things due to their inherent nature—the lack of a permanent essence yields a causally related world of material and mental objects (Dorjee 2013, pp. 50–57). When the emptiness of things is experienced

Religions 2023, 14, 54 3 of 9

and one acts out of the realization of interdependence, a student is said to be enlightened, according to Buddhist traditions (Dorjee 2013). Although the Buddhist schools argue for an impermanence of all things and lack of an essential nature, other Indic traditions, such as yoga and Vedanta, follow a similar line but emphasize the existence of a nonmaterial, nonmental self. Buddhist practices emphasize the experience of the nonexistence of the self. For instance, to highlight the distinction made above with the yogic concept, both schools accept that the mind is ultimately an impermanent object. Buddhist philosophers, such as Nagarjuna, note that the mind dissolves to an experience of non-self, so that the practitioner realizes a state of interconnectedness with all else (Garfield 2002). In contrast, a yogi, such as, Patanjali highlights that the practitioner experiences a state of oneness with all, but this is through the realization of a self, beyond the mind and intellect (Bryant 2009).

Regardless of this metaphysical difference, the analysis of happiness is similar, in that almost all Eastern contemplative traditions argue for a worldview that denies the permanent essence of objects, whether they be material or mental strata. As a result, their pedagogies seek to implement practices that emphasize the interconnectedness of all things beyond their illusory nature through meditation or other contemplative, introspective exercises.

3. Eastern Practices & Their Pedagogy

There exist metaphysical differences, albeit significant, in the philosophical traditions of Buddhist mindfulness and yoga, but this paper will concentrate more so on their pedagogical method and ability to highlight the similarity between the material world and the mind. The similarity among most Eastern contemplative traditions is in their inquiry into the objective world and evaluation of what it means to be a subject (Roy 2009). As a result of this paradigm, there has been a development of not only practices highlighting this contemplative paradigm, but a specific pedagogical approach. While popular forms of these practices, often culturally appropriated, provide physiological benefits, the philosophies intend to bring the individual closer to an awareness of self, others, and the environment. Specifically, Buddhist practices argue that in the observation of the mind does one realize the interdependence of all mental occupants and the physical universe. In yoga, Patanjali presents the source of oneness as being the seer, the ultimate self, whereas in Buddhism, pratityasamutpada results from the experience of the lack of a seer (this seer has also been discussed by various commentators as having a relationship with *Isvara*, a personal God/supreme consciousness or being one with God, but this may differ based on the specific philosophical tradition. In all, this is not particularly relevant to the goal of the paper) (Bryant 2009). This informs the foundation for its pedagogical framework. While Buddhist mindfulness seeks to affirm this endless dependency, Orr argued: "the understanding of how things really are that both Buddhism and pre-Buddhist yoga sought was first and foremost the understanding of one's own nature" (Orr 2004). As described, Eastern wisdom traditions provide a framework and practices to observe the mind and achieve an experience of subjectivity. The pedagogy, consequently, seeks to empower each student and educator with the potential experience of interconnectedness.

With this intent toward education comes a specific pedagogical method. Because the goal of such an approach to teaching is to reach a deeper awareness for both the educator and student, activities such as meditation, introspective journaling, and empathy practices are fundamental. Meditation, whether yoga or mindfulness, not only allows students to better understand their anger, depression, and other mental health struggles, but provides a compass through which they can view everyday experiences (Sellman and Buttarazzi 2020). Researchers argued that doing meditation exercises in groups impacts educator-student relationships and provides insight into the individual's own thinking and biases (Sellman and Buttarazzi 2020). More specifically, regular practice in a classroom creates a habit of observing one's own first-person inquiry. Buddhist mindfulness meditation highlights the individual's ability to observe thoughts and emotions as they arise, noticing their dependent and fleeting nature. Thus, Dorjee (2013) presented that, although it seems as if the experience of being completely mindful or empty is nihilistic, it is in

Religions 2023, 14, 54 4 of 9

fact empowering. When a student learns to observe thoughts, their arising, and fadeout, the individual grasps a level of awareness that all are fundamentally connected, or interdependent (Mookerji 1947). As Orr described it, the practice of meditation in Buddhism is simply to pay attention to the outside world, mind, breath, etc. (Orr 2004, pp. 10-14). Although the Buddhist philosophers would argue against the permanence of consciousness, as taught by yoga or Vedanta, the Eastern schools provide practices and pedagogical frameworks to allow for a study of the mind in general. What is important to note here are the levels of experience, as specified by the philosophers of the Indic traditions. In other words, it is not the case that every practitioner who begins to live by and practice the tenets of traditions, such as yoga, Vedanta, or Buddhist mindfulness experiences the interdependence and unity of all things. Rather, as Purser (2019) noted in his pivotal book "McMindfulness," the modern commodification and consumerism associated with mindfulness and spirituality have led to a belief that enlightenment is a purchasable experience. Not only does this do a disservice to the framework of the contemplative traditions, Purser argued, but also leads practitioners into a misunderstanding of their own subjective experience. Philosophers, such as Nagarjuna and Patanjali, emphasize levels of meditation and contemplative practice. While the latter describes stages of samadhi (meditative absorption), the former explains how initial breathing, observation of noises, recognition of mental fluctuations, and eventual realization of sunyata lead to a wholesome experience of interdependence (Bryant 2009). In fact, similar mindfulness practices are implemented by various Indic traditions in order to build an elementary awareness of thoughts, emotions, and sense of self before leading to higher states of absorption (this is common in vipassana teaching). In addition, they understood, as Mookerji presented, that the suffering and pursuit of happiness lie not in objects external to the self, but within the mind and its delusions (Mookerji 1947). Consequently, all of these spiritual schools emphasize, most fundamentally, practices of self-inquiry. This is their intent at the core (Mookerji 1947).

In all, through practices such as meditation and concentration, beyond just being a collection of exercises, these spiritual traditions are pedagogical approaches. Their intent and methods emphasize being grounded in the experience of subjectivity through an understanding of the interconnectedness of mental contents. In this way, a first-person inquiry is highlighted by the educator and student. Moreover, in relation to the Buddhist principle of pratityasamutpada, contemplative practices yield an understanding of the causal relationship between objects of an individual's observation. Consequently, a sentiment of compassion is developed not only for oneself, but all others and things, as described by the traditional philosophers. This empathy, as Varela discussed, is not only a result of this interconnected experience, but also a method to achieve that experience (Varela 1999). In other words, students of these traditions, although they may not have had an experience of nirvana, engaged in service-oriented activities and were motivated to concern themselves with altruism so that the realization of *pratityasamutpada* would be more evident (Mookerji 1947). Besides just ancient pedagogies founded in these Eastern practices, educational institutions, such as Rabindranath Tagore's in the twentieth century, also attempted to instill the principle of the interconnectedness of all beings and things through contemplative practices. Later, this paper will discuss the importance of this approach to teaching science as it pertains to the climate crisis.

4. Science as Method & the Subject

Dewey argued that science ought to be taught as a method, rather than a collection of facts, experiments, and truths about the natural world (DeBoer 1991). In fact, this concept of concentrating on the reasoning process of scientific thinking—as opposed to the outcome of experiments or centuries of discoveries—was presented by philosophers, such as Spencer, in framing modern science education (DeBoer 1991, p. 12). Unfortunately, the scientific method of hypothesizing, experimentation, and drawing conclusions is taught so mechanically that students often perceive science and its contents as dogmatic approaches

Religions 2023, 14, 54 5 of 9

(Rudolph 2014, pp. 1067–70). This misconception about the nature of science rids the student of any aesthetic experiences related to scientific principles in their daily life, and as a result, the teacher and learner are further disassociated from science as a style of thinking about problems and natural phenomena (Pugh and Girod 2007). When science is not taught as a method, its reach is limited by the classroom, as the process of questioning, testing, experimenting, and developing theory ceases outside of the four walls. Consequently, the student sees science as a topical umbrella of physics, biology, and chemistry, instead of a process of analyzing, interacting with, and contributing to nature. Even Kuhn implied that science is a way of thinking, more than a collection of subtopics or constants to describe the natural world, as it holds the potential to constructively impact every decision in human life (Rudolph 2014).

Science, fundamentally, as a method to observe and understand the physical world, is a subjective experience, according to Descartes (Roy 2009). It is the process by which a subject navigates, understands, and interacts with the physical world, the object. This Cartesian view, subject-object dualism, is the basis of the argument that science is most fundamentally a process of first-person inquiry (Roy 2009, p. 82). What exactly does this mean? As Dewey described it, science is a habit of mind, which requires recognition of one's cognition and value judgment (Rudolph 2014, p. 1061). It is the lens through which an individual sees a problem and the natural world, and not only seeks to understand it, but then enables a solution that impacts oneself, others, and potentially, the environment. Pugh and Girod argued that science as a method and worldview is best taught when students are given aesthetic, raw experiences that live with them beyond the classroom (Pugh and Girod 2007, p. 16). More specifically, when students are provided opportunities to implement and evaluate their first-person inquiry, they not only activate their capacity to engross themselves in the content but actualize the reality of being subjects interacting with the physical universe. Science, when taught and actualized as a method rather than a dogmatic process, allows for a two-step process: value-based judgment and informed decision making (Lee and Brown 2018). In a study from the UK, science educators found that when students were taught biology and ecology in a situated context in their local environment, they were more likely to question their values with regard to decisions such as food choice, vehicle emissions, and littering (Lee and Brown 2018). More often than not, a connection to science or scientific reasoning is felt by few educators and learners due to a curriculum that lacks any organic connection to the physical experience of any individual (Dewey 1956, p. 202). In contrast, recognizing the role contemplative pedagogy could have on students from rural areas, Tagore emphasized activism for students of his school, which was based on the paradigm and practice of ahimsa (literally translated as "non-violence," a necessary ethical practice in almost all traditions of Indian spirituality), by structuring social service programs into the instruction of courses (Malaviya 2021, p. 81). Furthermore, by teaching outside the local ecosystem, as Louv (2006) argued, not only do students explore the regional nature, but observing and appreciating it leads to a realization of the similarity in experience amongst all beings.

In order to best teach science as a method and habit of mind, a pedagogy that is not deeply entrenched in content and facts alone is necessary. When the individual experience of the student is emphasized, learning takes place unintentionally and naturally (Lave and Wenger 1991, pp. 52–56). In other words, the student's experiences shape the context within which teaching and learning have the deepest impact. Science, then, is seen as a constantly occurring phenomenon in their daily life, as well as a method of thinking about problems in their inner and outer lives. The peripheral participation that Lave and Wenger discussed becomes a reality for students when science is perceived as a relevant process in their daily problem-solving (Lave and Wenger 1991). Whether it be in their external lives (e.g., neighborhoods, homes, communities) or inner lives (e.g., emotions, beliefs, values), a pedagogy that rejects the reality of students cannot possibly engage them in scientific reasoning as a worldview. In summary, if science is to be taught as a method and habit of mind, then the subjective experience of students is to be emphasized and implemented.

Religions **2023**, 14, 54 6 of 9

Only then does the ideal of science as habitual first-person inquiry impact the everyday lives of students and their communities, as Dewey imagined (Rudolph 2014, p. 1061).

5. Contemplative Pedagogy & Interconnectedness in Science Education

Science education evolved more often with industrial and defense interests than to teach a method of thinking for the future of a problem-solving society, as Dewey argued (Rudolph 2014, p. 1069). The solution, as presented by Pugh and Girod (2007), is curriculum and instruction based on aesthetic experiences that affirm the subjective context of the learner. However, if the Deweyan and Spencerian vision is to be realized, science pedagogy—which continues to spotlight analysis of the physical world without mention of understanding an individual's experience of being a subject—needs a shift (Pugh and Girod 2007, p. 18). First-person inquiry, the pillar of scientific discovery and reasoning, is a skill that is sharpened through awareness of one's own biases, intentions, and rationalizing process (Roy 2009, pp. 158–60). In order to achieve this, contemplative pedagogy, particularly those of the Indic traditions of yoga, mindfulness, and Vedanta, offers a distinct approach. Due to the intention of these spiritual traditions to concentrate on the internal life of the learner, the student builds the skill of active awareness.

Buddhism overcomes Cartesian dualism through mindful practice, or one that allows the individual to realize an interconnectedness. Through a keen observation technique, the distinction between body and mind as separate, independent entities dwindles (Roy 2009). In other words, the practitioner comes closer to experiencing the interdependence, and therefore, the non-distinct existence of mental and bodily contents. Buddhism, both in its genesis and evolution, concentrates on a pedagogy and educational framework that emphasizes living as an active participant in the world, rather than a consumer (Mookerji 1947). Through the concept of mindfulness, an environment is cultivated that highlights the connected nature of all thoughts and material entities, thereby allowing the educator and student to feel a union. Furthermore, a duty or dharma towards other students, the educational environment, the surrounding nature, family, and community is developed (Mookerji 1947, pp. 374–90). Dharma is a central thematic imperative in many Eastern traditions, as it provides the practitioner with the agency and paradigm to act empathically with one's self, family, community, and the entire planet. For this very reason, researchers argued that Buddhist mindfulness, along with the spiritual perspectives of Eastern traditions, offers a perspective toward the environment and climate that can improve the decaying living conditions and consumption-based degradation that many communities face (Purser 2019). Put simply, a worldview influenced by the inquiry of Buddhism or yoga is a sustainable response to the continuous climate crisis through the realization of interdependence. Bryant highlighted the commonality of the Indian spiritual traditions,

Even as our modern world respects the heroism involved in sacrificing one's life for the protection of fellow human in recognition of a common humanity or humanness, and certain moral commentators are presently taking a hesitant step beyond the concept of human equality by grappling with the extent of our own commonality with the great apes ... traditions extend this principle by recognizing the common consciousness among all beings. (Bryant 2009, p. 244)

Orr (2004) argued that when practices associated with these traditions allow an individual to see their interconnectedness to other people and things, an experience of oneness arises. Consequently, a sense of responsibility, stemming from compassion, towards local and global environmental crises is inevitable. In an educational era that highlights the gravity of human-induced climate change, Orr's description is even more imperative, as the practice of awareness and experience of *pratityasamutpada* lead to actionable steps in the classroom.

In contrast to the Buddhist mindfulness approach, yoga highlights a stilling of the fluctuating states of the mind. As a result of this experience, the "seer then abides in its own nature" (Bryant 2009). In other words, an experience of pure subjectivity is realized by

Religions 2023, 14, 54 7 of 9

the practitioner. Buddhist mindfulness argues that the stilling or observation of the mind leads to an awakened experience of realizing the interdependence of all things. Although different in their arguments for the existence or lack thereof of a subject, both traditions are founded on the principle that physical and mental objects, and thoughts, are causally connected. When one experiences their fickle nature, an experience of unity is actualized. This is why many practices within the traditions are similar (Mookerji 1947). In all, wisdom traditions claim that the recognition of interdependence provides an awareness of divinity in others, plants, animals, and all of nature (Nigal 2012).

Buddhist mindfulness brings a learner closer to realizing what it means to be a subject through the study of the lens itself, the mind (Ergas 2019, pp. 394–96). This fundamentally provides the framework for a student to see science as a method of inquiry and interacting with the physical world, since the approach is inside-out—an exploration within leads to a transformation in how one experiences the world. Science education reform often revolves around evolving scientific principles or applying newer experimental methods, but if the goal is to develop a Deweyan habit of mind that doesn't cease in the classroom, then a pedagogy that highlights the subject's awareness and cognition is necessary. This pedagogical approach is thus relevant in the science classroom through activities such as meditation, introspective journaling, and empathy practices. Meditation paradigms, as described, such as Buddhist mindfulness, bring students to an awareness of their role in the classroom, and also allow them to appreciate and value peers, educators, and the environment around them (Malaviya 2021). Introspective journaling develops a regularity in articulating and accepting one's thinking pattern so that it can be improved and reflected upon. This process is scientific in that one's thought processes and rationale are observed, questioned, and transformed. Consequently, this helps students understand science as a method of inquiry for both curriculum-based concepts and their personal thoughts. Consequently, the student organically develops observational skills in becoming aware of individual mental occupants, such as thoughts, emotions, reasoning, and biases (Ergas 2019). Finally, empathy practices, such as involving nature in a classroom and visiting the cultural context of the student body, develop an extrapolation of classroom content. Beyond the evidence that ecological exposure has positive effects on young people's well-being, observing scientific principles occurring undisturbed in nature brings students closer to the curriculum (Malaviya 2021, p. 85). A connection between the student, educator, and environment is built, such that each recognizes the other and the cultural context as a contributing participant (Malaviya 2021). Empathy practices such as incorporating nature in the classroom, teaching within surrounding ecosystems, and even applying iconography, symbols, and aesthetics of the student cultural context inform their environmental decisions and activism (Malaviya 2021, pp. 85-87). Mookerji argued that the practices of learning within and about nature to then extrapolate the experience of subjectivity to all within a community or kingdom were relevant within the ancient roots of Indic education systems (Mookerji 1947).

Through such practices in a teaching methodology, *pratityasamutpada*'s theme of experiencing the connectedness of all things, whether physical or mental, is solidified in the student's understanding. Moreover, science's concept of creating a problem-solving society and habit of mind within young citizens, as Dewey suggested, is better realized through the emphasis on dharma and activism within traditions such as Buddhist mindfulness and its predecessors. Spiritual traditions such as yoga and mindfulness are implemented in professional development and medical conferences, but they are often applied as interventions in these fields, not paradigms. The instruction, as a result, is stripped from the pedagogical method (Sellman and Buttarazzi 2020). In contrast, when the entire paradigm of valuing and observing the mind is adopted, the first-person inquiry is highlighted, and thus, so is the cornerstone of science as a method of understanding and interacting with the world.

Religions 2023, 14, 54 8 of 9

6. A Summary of the Proposed Shift

In summation, for centuries, contemplative traditions of various indigenous cultures provided insight into the human subjective experience through practices that observe, evaluate, and control the mind. The pedagogical approach of Indic contemplative schools such as yoga, mindfulness, and Vedanta is based on the concept that if an individual can observe and still the mind, then not only does one gain an awareness of one's self and the external world, but also an ability to evaluate one's own opinions, biases, intentions, and perspective. Of these, the paper concentrated on the idea of pratityasamutpada in Buddhist mindfulness and the experience of interdependence (Pugh and Girod 2007, pp. 15–17). The dualism emphasized in Western science education often disregards the nonmaterialist perspective of wisdom traditions, and as a result, fails to accept the congruence of physical and mental objects (Roy 2009). More specifically, the way science is taught and grasped at the secondary and post-secondary levels often propagates the scientific method as a dogmatic, mechanistic process (Ergas 2019). Consequently, devoid of any sense of selfinquiry and subjectivity, this pedagogy results in an application of science that is detached from student awareness of one's connection to the planet and environment. As Kuhn emphasized, for a generation of young people to feel a deep sense of worth, connection, and oneness with the planet, it is an ancient, yet relevant approach that is necessary for students to adopt scientific reasoning for personal and social welfare (Kuhn 1962). In all, this paper has argued that through the paradigm of first-person inquiry provided in philosophies such as Buddhist mindfulness and other Indic traditions like yoga and Vedanta, the teaching and learning of science can come closer to the Deweyan ideal of science being a vehicle for social well-being.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: The study did not involve humans or require any informed consent.

Data Availability Statement: The study did not report any data.

Conflicts of Interest: The author declares no conflict of interest.

References

Bryant, Edwin. 2009. The Yoga-Sutras of Patanjali: With Insights from the Traditional Commentators. New York: North Point Press.

DeBoer, George E. 1991. A History of Ideas in Science Education: Implications for Practice. New York: Teachers College Press.

Dewey, John. 1956. The Child and the Curriculum and the School and Society, combined ed. Chicago: University of Chicago Press.

Dorjee, Lama D. 2013. Stillness, Insight, and Emptiness: Buddhist Meditation from the Ground Up. Boston: Snow Lion.

Ergas, Oren. 2019. A contemplative turn in education: Charting a curricular-pedagogical countermovement. *Pedagogy, Culture & Society* 27: 251–70. [CrossRef]

Garfield, Jay L. 2002. Empty Words Buddhist Philosophy & Cross-Cultural Interpretation. Oxford: Oxford University Press.

Kuhn, Thomas S. 1962. The Structure of Scientific Revolutions. Chicago: The University of Chicago Press.

Lave, Jean, and Etienne Wenger. 1991. Situated Learning: Legitimate Peripheral Participation. Cambridge: Cambridge University Press. Lee, Eun Ah, and Matthew J. Brown. 2018. Connecting inquiry and values in science education: An approach based on John Dewey's philosophy. Science & Education 27: 63–79. [CrossRef]

Louv, Richard. 2006. Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder. Chapel Hill: Algonquin Books of Chapel Hill. Malaviya, Ritambhara. 2021. Promoting "maitri" through education: Tagore and education for peace. Journal of Peace Education 18: 72–91. [CrossRef]

Mookerji, Radha Kumud. 1947. Ancient Indian Education. New Delhi: Motilal Banarsidass Publishers.

Nigal, S. G. 2012. Secularization, man, and the ecological crisis. Journal of East-West Thought 3: 51-60.

Orr, Deborah. 2004. The uses of mindfulness in anti-oppressive pedagogies: Philosophy and praxis. *Canadian Journal of Education* 27: 477–97. [CrossRef]

Pugh, Kevin J., and Mark Girod. 2007. Science, art, and experience: Constructing a science pedagogy from Dewey's aesthetics. *Journal of Science Teacher Education* 18: 9–27. [CrossRef]

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

Roy, Krishna. 2009. Subjectivity in Science: Interpretations of the Cartesian Project. Kolkata: Ramakrishna Mission Institute of Culture.

Rudolph, John L. 2014. Dewey's "science as method" a century later: Reviving science education for civic ends. *American Educational Research Journal* 51: 1056–83. [CrossRef]

Religions 2023, 14, 54 9 of 9

Sellman, Edward M., and Gabriella F. Buttarazzi. 2020. Adding lemon juice to poison: Raising critical questions about the oxymoronic nature of mindfulness in education and its future direction. *British Journal of Educational Studies* 68: 61–78. [CrossRef] Varela, Francisco J. 1999. *Ethical Know-How: Action, Wisdom, and Cognition*. Stanford: Stanford University Press.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.