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Separation and Unity: Zen Koan in Environmental Theory and Education

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Abstract

The ecological crisis has been traced to a rupture in the human-nature relationship, which sees the natural world as inert materials that serve human utility. This prevailing sense of separation is thoroughly embedded in Western culture through engrained metaphors that reinforce a view of the Earth as a subject of human mastery. To counter the disjuncture between humans and nature, some theorists have suggested a unitive view of nature, while others have argued for more expansive forms of identification that engender a more responsive ecological ethics. Despite these efforts, the human-nature dichotomy remains a perennial issue of debate, especially for environmental educators who strive to cultivate a more harmonious relationship with the earth. This article examines the Zen Koan (case or example) as a pedagogical innovation that hones the learner's ability to entertain opposing propositions. Humans are both united with *and* separate from nature at the same time. The Koan encourages an epistemological fluidity and openness to ambiguity that can enrich and deepen inquiry. In the context of environmental education, this contemplative approach to investigation can complement immersive pedagogies that enjoin somatic and sensory experience in explorations of the natural world.

Keywords: human-nature dichotomy; deep ecology; Koan; Zen; contemplative education; environmental education; phenomenology; embodiment

Over the last few decades, much has been written about the ecological crisis. Environmental theorists who have traced the historical-cultural roots of the present predicament have pointed to a rupture in the human-nature relationship that started at the dawn of agriculture during the Neolithic period (Evernden, 1985; Shepard, 1998a, 1998b), and which accelerated throughout the Axial Age with the advent of Greek philosophy. The rupture culminated during the Enlightenment, which established objective science as epistemology par excellence (Berman, 1981; Tarnas, 1993). Separation from the ecological sphere is now ensconced in modern consciousness through embedded metaphors that conceive of *environment* and *nature* as subjects amenable to human manipulation. Some ecological theorists have attempted to address the rupture by establishing unity with the natural world; however, those who overstate such unity can often meet criticism. The perennial debate over separateness and unity, both in the existing literature and in current discourse, instantiates a persistent struggle to clarify humans' relationship with the planet. Even if the issue is not deliberately taken up by environmental educators as classroom debate, unconscious speech and actions inscribe and reinforce entrenched positions on the matter.

This article revisits the human-nature dichotomy, not by proposing a resolution, but by holding steady the antinomy between countervailing perspectives. The Koan (meaning 'case' or 'example') is hereby examined as a pedagogical tool to: (a) highlight the delineative limits

of rational concepts, and (b) immerse the learner in an inquiry that produces no definite settlement, and no final understanding under the auspices of ideation, both linguistic and conceptual. The capacity to entertain contradictory claims while remaining open to mystery is vital to the goals of environmental education, as students grow confident in their knowledge of the natural world without assuming a sense of mastery over nature, retaining a humility and reverence for that which eludes ultimate understanding. The Koan nurtures a healthy attitude toward the wrangles produced by logical cogitation and fosters a disposition that is neither rational nor irrational (Berry, 2000), but that appreciates a complex and numinous world that yields no ultimate answer. This article begins with a brief review of the human-nature dichotomy, and considers, via Arne Naess, the forms of identification and connection that enjoin a more holistic relationship to land. With the opposition of separation-unity in clear view, the article puts forward the Koan as a method to entertain countervailing claims and somatic-sensate forms of inquiry. The article concludes with recent examples of contemplative approaches to environmental education that instantiate the potential of the Koan as the basis for pedagogical methods.

Human-Nature Dichotomy

According to Paul Shepard (1998b), the ecological crisis traces back to the beginning of the Neolithic period with the dawn of mono-crop agriculture, which saw a significant change in land practices as grain fields replaced forests, rivers were diverted for irrigation, and soil began to erode under intense farming (Montgomery, 2012; Shepard, 1998b). Changes in the landscape coincided with changing cultural mores as early civilisations in the Middle-East and Asia saw themselves less as beneficiaries of providential nature, and more as determined cultivators who coaxed sustenance from the land (Diamond, 2011; Shepard, 1998a; Swimme & Berry, 1994). In ancient Greece, pre-Socratic philosophers debated monism and pluralism, the metaphysics of oneness and separateness (Burnet, 1920). The ancient Greeks tried to discern the constituent elements of nature, as well as their respective properties, thus initiating an intellectual tradition that saw nature not only in its given form, but also essayed to identify the inherent properties of matter (Burnet, 1920; Tarnas, 1993). By elaborating on the perfection of transcendental forms that underlie objects encountered in ordinary perception, Plato established the distinction between the *ideal*, apprehended through the rational mind, and the *material*, that which is given in ordinary perception (Plato, 1951, 2008).

Plato's metaphysics would have wide-reaching ramifications throughout history, culminating in Descartes's (2008) *Meditations on First Philosophy*, which presented the bifurcation between the *res cogitans* (the immaterial mind) and the *res extensa* (the extended, physical universe). On this severance of mind and matter, Thomas Berry (2006) wrote:

In this single stroke, [Descartes] devitalized the planet and all its living creatures, with the exception of the human . . . the thousandfold voices of the natural world became inaudible . . . the mountains, rivers, wind, and sea all became mute insofar as humans were concerned. (p. 18)

This philosophical move severed a basic bond with the more-than-human world, rendering nature into inert objects with little ontological or ethical status beyond their commercial utility (Bai, 2013). The separation between mind and matter became established as the ethos of the enlightenment, coterminous with the subject-object dichotomy, which replaced sensuous identification with nature and instituted a division between the inside and outside, the knower and the known (Berman, 1981). This epistemological shift has resulted in rapid technological and scientific 'advancement' and an industrial and digital revolution that has drastically altered the material composition of the planet's living systems. At the same time, techno-scientific mastery has left Western civilisation in a desanctified world of inert matter, bereft of enchantment and devoid of participation (Berman, 1981).

The human-nature dichotomy remains prevalent in modernity; embedded within culture is the tacit view of the planet as a collection of materials available for human use. This prevailing position is enfolded into language in the form of inherent metaphors found in common utterances that structure fundamental experience. Examined in this way, a metaphor is not merely a literary device to evoke similarities between objects for aesthetic or rhetorical effect, but rather they are fundamental schemas that construct the basic forms of understanding (Lakoff & Johnson, 2003). Expressions related to time, for example, draw upon embodied orientation (future is *ahead* and the past is *behind*), and thus structure a linear and progressive concept of time, mapping the abstract (time) using the terms of the concrete (the body). In matters of ecology, the human-nature dichotomy is enfolded into language through phrases that employ dualisms that render nature an inanimate object, amenable to human manipulation and control 'Natural resources', 'environmental stewardship', 'eco-system services', and 'geo-engineering' all play upon the same metaphorical conception of the earth as inert material subject to human will. These metaphors have the power to constitute experience — the natural world is not simply spoken of as objects, but are actually experienced as such (Lakoff & Johnson, 2003). So long as public discourse draws upon engrained metaphors, attempts to achieve environmental goals using the language of human-nature dichotomy is doomed to failure (Bowers, 1997; Lakoff, 2010).

In reaction to the prevailing assumption of human-nature dichotomy, some writers have presented a unitive view of the human-nature relationship. John Seed's oft-cited epiphany stands as notable example. In opposition to a development project that threatens to denude a swath of ancient forest, Seed writes: 'I am part of the rainforest protecting myself. I am that part of the forest recently emerged into thinking' (Seed, Macy, Fleming, & Naess, 2007, p. 36). For those who take for granted the human-nature dichotomy, 'I am the forest' can seem presumptuous and nonsensical, suggesting an impertinence that muddles ontology and addles ethics. Borrowing from Hegel, Murray Bookchin calls such unitary declarations 'a night in which all cows are black' (Bookchin, 1989, p. 101). The erasure of the self as an agent of action also effaces the basis of ethics. The conflation of the 'I' and the forest — and by extension *my interests* and those of the forest — upends both subject and object, leaving no forum for ethical discernment, and no room for meaningful action. Regardless of whether Bookchin was fair in his criticism, his remark is a reaction to bold statements of unity that appears untenable upon a scrupulous examination of the human-nature relationship.

John Seed's pronouncement can be seen as part of a tendency within the Deep Ecology movement, which attempts to establish a harmonious relationship with land and local eco-systems (Drengson & Inoue, 1995). Arne Naess, a prominent figure within Deep Ecology, proposes a more expansive self-identification (as opposed to the parochial, egoistic self) that sees one's wellbeing inextricably involved in that of others. Naess writes:

Because of an inescapable process of identification with others, with growing maturity, the self is widened and deepened. We 'see ourselves in others.' Self-realization is hindered if the self-realization of others, with whom we identify, is hindered . . . all that can be achieved by altruism — the dutiful, moral consideration of others — can be achieved — and much more — through widening and deepening our self. (Naess, 1995, p. 14)

Identification, according to Naess, is a form of empathy and solidarity with other beings, a compassionate concern for the plight of other creatures that cannot occur in a state of alienation. Like Aldo Leopold, who came to solidarity with land after witnessing the fading fire in a wolf's eyes (Leopold, 1986), Naess relates his encounter with a flea that had jumped into a bath of acid chemicals: 'To save it was impossible. It took minutes for the flea to die. The tiny being's movements were dreadfully expressive. Naturally, I felt a painful sense of compassion and empathy . . . I saw myself in the flea' (Naess, 2008, p. 89). This encounter with a flea's suffering instantiates a form of connection that does not declare unity, but is nevertheless concerned with another's plight.

Compassionate identification with the more-than-human world evinces the complex and manifold ways that humans are woven into webs of relation, beyond the physical boundaries of one's skin. Naess' view of self-identification encompasses both an emotional acuity that takes seriously the suffering of others, as well as an intellectual integrity that fashions an ethic based not on abstract ideals and duties, but rather on commitment to the more-than-human.

Although self-identification can be seen as a form of relatedness and co-involvement with other beings, critics can counter that such identification does not resolve the human-nature dichotomy, but is rather a re-iteration of the very same rupture. After all, one can only feel empathy for something distinctly other, something discretely separate, whose experience is not one's own. To witness a struggling flea in its final moment is to feel the pangs of emotional affinity with other beings, to be *affected by* another's death rather than to expire along with the other. Emotional solidarity does not abolish the ethical problems posed by one's separateness. At issue is the ontological status of *identification*, and whether empathy and compassion clarifies or complicates the human relationship with the more-than-human world.

Koan as heuristic tool

If Naess' work does not adequately bridge the divide, the flaw lies not in his suggestion that people have the empathetic capacity to hold the natural world in loving regard; rather, the dichotomy itself is the product of a cogitative wrangle that can only arise from a certain manner of thinking, a mindset whose inevitable conclusion is intractable antinomy. There is no final settlement to the human-nature dichotomy because the logic that produces the problem cannot sponsor a definite solution. Rather than abolishing a disjuncture, the alternative might lie in granting opposing positions their respective claims; that is, humans are both united with *and* apart from nature. Can one maintain this opposition while retaining a semblance of logical coherence?

Philosophical conundrums that feature prominently in Western thought can be examined afresh via Eastern perspectives. Chinese philosophy, for example, tends to provide harbour for ambiguity and paradox. Uli Sigg (2016) has noted that a specific strength inherent in Chinese culture lies in 'the capacity to fuse contradictions into a single proposition' (Sigg, 2016, p. 8). Chinese philosophy thrives on contradictions — but the thrust of its discourse lies not in the attempt to resolve inconsistencies or the abolishment of opposing logic, but rather the admission of mutually exclusive claims through the recognition of their respective partiality.

A potent example of such expression can be found in the Zen Koan (公案; *Gong-An in Chinese, and Ko-An in Japanese*), which translates as case or example. Used by Buddhist teachers as a means of bringing about insight, the Koan can be thought of as a puzzle, either told in the form of an explicit question or an episode from the lives of Zen teachers. The cases often feature ordinary situations where conventional wisdom is confounded by an unusual and sometimes nonsensical utterance by a teacher. The extant collection of Koans number in the hundreds, of which *The Gateless Gate* and *The Blue Cliff Records* remain the most studied anthologies. In his introduction to these anthologies, Grimstone (2005) writes:

A Koan is a problem or subject for study, often, at first sight, of a totally intractable, insoluble kind, to which the student must find an answer. This answer is not to be reached by the ordinary process of reasoning or deduction. Indeed, to speak of an 'answer' is perhaps inappropriate, since it suggests finding a solution to a problem by these methods. A Koan is not an intellectual puzzle . . . [it is] no ordinary sort of problem [and] the answers which is accepted by the student's teacher may be as seemingly irrational as the Koan itself. (p. 14)

Grimstone demonstrates a degree of circumspection around metaphors such as 'puzzle', 'problem' and 'answer'. These descriptors lend approximate meaning to the Koan, but they do not capture its function in its historical-religious context. The Koan is neither a problem nor

a puzzle because there are no ultimate solutions to be found. One finds the Koan puzzling because a mind habituated to conception needs an ideational hook on which to hang its hat — but the Koan denies any such convenience.

What is it that a student meditates on when he works on a Koan? Thomas Merton (1999) explains:

The student seeks at all costs to reach the heart of the matter in Koan study. Therefore, he learns to 'work through' the Koan, to live it as his master has lived it. In fact, the heart of the Koan is reached, its kernel attained and tasted, when one breaks through into the heart of life itself as the ground of one's own consciousness. It is then that one sees the 'answer,' or rather one experiences oneself as the question answered. The answer is the Koan, the question, seen in a totally new light. It is not something other than the question. (p. 236)

From Merton's exegesis, we can say that there is a 'problem' or a 'question' that arises in the matter of human experience, which features 'permanency and changeability, eternity and momentariness, immortality and dying every minute' (Suzuki, 2000, p. 36). Such contradictions demand an answer in the form of resolution. Yet the 'answer' cannot be a solution that dissolves the question. When Zen students tackle a Koan, they exhaust their intellectual resources and run against the futility of mental effort; only when they surrender their cognitive devices are they ready to realise the unconditioned ground of mind, that which underlies, permeates and transcends concepts with their opposing antinomies. Seen in this light, the Koan is a heuristic device designed to reveal the constructed nature of cognitive schemas and conceptual contradictions. The Koan is a tool of inquiry that highlights the partiality of thought, and of intellectual inquiry itself.

As an illustration of the foregoing discussion, we might look at how Koans address opposing claims. In case 30 of the *Gateless Gate*, a monk asks Baso 'What is the Buddha?' Baso replies: 'This mind is the Buddha' (Reps & Senzaki, 1985, p. 144). However, the same question finds a contradictory answer in case 33: A monk asks Baso 'What is the Buddha?' Baso replies: 'This mind is not the Buddha' (Reps & Senzaki, 1985, p. 147). These two answers are logically contradictory and mutually exclusive: the mind is either A or B; it cannot be both A and B. Yet in defiance of logic, the Koans would seem to suggest the latter. To force a choice between A or B is to favour logical coherence, whereas the Buddhist is more likely to prefer logical completeness by opting for both A and B (S. Campbell, personal communication, September, 2014). Logical completeness does not diminish the sharp opposition of contradictory claims. To grant both A and B is to admit a deeper capacity to entertain opposition, an ability to work *with* and *through* claims with the understanding of each as particular and contingent. The Koan instills the realisation that the contradiction between ideas cannot be resolved through the logic of the ideas themselves; the epistemic possibilities afforded by ideation also mark their limitations in the quest for understanding.

From the aforementioned examples, the Koan can be a heuristic device that aims to include and transcend the opposition of binaries. Richard Kearney (2011) defines *transcendence* as the surplus of meaning that exceeds faltering cogitation, the prospect of insight that always lies beyond complete apprehension. The poles of countervailing claims serve as the tensive ground on which meaning finds its course: the ability to transcend is 'not to deny differences between two poles, but to live the productive tension between them' (Kearney, 2011, p. 165). Ultimate insight cannot be mastered, captured with formulae, nor crystallised into discrete propositions. Each claim is tentative and contingent, offering disclosure within a set of epistemic and socio-historical conditions. Kearney believes that the work of interpretation must always make space for the surplus of meaning; every ontological proposition is incomplete — ipso facto, no proposition on matters of the absolute, no matter how persuasive, should nullify the merits of a contesting claim, nor foreclose consideration of countervailing perspectives. In line with of Kearney's view of transcendence, the Koan can be a way to inhabit the tensive ground on which to transcend the contest of ideas that issue from absolute claims, a tool that helps loosen the grip of conceptualisation.

Extrapolating further from its design as a heuristic device, Merton (1999) writes that the Koan can be seen as ‘a paradigm of life itself’ (p. 240). Because ultimate questions have no ultimate answers, an irresolvable problem that finds no definitive settlement signals productive and transformative potential. There is a temptation to see claims as mutually exclusive, yet the Koan entertains and resists dichotomy at the same time. A nuanced treatment of opposition might identify the gradients that span the poles of oneness and otherness, such as Evernden’s (1985) notion of self as a field of involvement. However, posed in the arena of contesting claims, such efforts ameliorate the tension between claims without addressing the terms of their opposition — a philosophy that skillfully manages shades of gray is nevertheless underwritten by black and white. It would be easy to say that the Koan negates contradiction by accepting all claims. Such a naïve reading of the Koan risks a careless dismissal of propositions and their antitheses by glossing over fundamental disagreement. The Koan affirms both unity and separateness, as well as the disjuncture posed by their contradiction. By this inclusion, the Koan also implies that neither are ultimately right. ‘Right’ and ‘wrong’, for that matter, are themselves ideational constructs that should be bracketed aside. The absence of a definitive settlement endows a space of possibility wherein opposing answers are countenanced and none are rejected. The Koan makes *transcendence* a necessity, as the surplus of meaning confers an epistemological dexterity not otherwise possible if propositions were left to militate a final settlement.

Educational and Practical Implications

Given that the Koan serves to hold countervailing propositions, how might it be used in environmental education? Although the Koan is hereby presented as a heuristic device, it does not follow that environmental educators should assign Koans to their students. Koan study arose in a specific religious-historical context and cannot be easily transported to other educational settings. Rather, it is the intention behind the Koan, the contemplative perspective from which it springs, that fosters an *attitude* of inquiry characterised by friendly scepticism and unremitting curiosity that can help students navigate their relationship with the more-than-human world. If environmental educators are concerned with ecological ethics and the relationship between humans and nature, then they may at some point muddle through variations of the unity/separateness debate. The presiding questions go something like this: *What is my relationship with nature? Are humans something distinct and unique altogether? What is my relationship to this tree, this meadow, this humming bird hovering in my sightline?* These questions are *Koan-like* because no final answer can serve a definitive response. No rejoinder should neutralise the inquisitional power of the question once and for all. The responsibility of the teacher is to uphold the tension posed by all propositions, to encourage the students to investigate the space of disjuncture while resisting the temptation to settle for an easy resolution. Persistence in the space of disjuncture will likely yield precious insights; and yet students must *transcend* each new discovery by recognising the surplus of meaning that lies beyond their grasp. Immersed in a wild place and fixed in observation, students may at times forget themselves in a moment of wonder. This forgetting of the self is akin to what Berry (2006) calls the ‘communion of subjects’. In these moments, subjective experience may indeed suggest an indivisible unity with place.

In other instances, encounters with the more-than-human world call upon students to act with care and discernment. *What shall we do with this wounded raven? What are the implications of treating the raven when we know it’s been killing hens in the barn?* These ethical deliberations recognise a suite of competing interests that unfurl from self-other dichotomy, without which action is void and agency has little clout. Educators can encourage students to hold both views (unity and separateness) on even kilter, to accept the respective truths they convey, indeed the complementarity that underlies their apparent opposition. The Koan reorients how we inhabit binaries, and enjoins the wisdom of seeing contrast over contradiction, apposition over

opposition. More importantly, this dexterity in the face of exclusive claims never cleaves to finality — the acceptance of countervailing views should be tentative, amenable to review and revision.

Several notable examples of this contemplative approach to outdoor and environmental education have emerged over the years. Biologist and writer David George Haskell (2012) has written a poetic and detailed observation of a square metre of forest floor in the woods of rural Tennessee, a small area which he calls a mandala. Over the course of 43 visits throughout an entire year, Haskell watches the forest floor with the inquisitive mind of a scientist, but also with the sacramental devotion of a contemplative. The guiding question of his investigation is simple: ‘Can the whole forest be seen through a small contemplative window of leaves, rocks, and water?’ Throughout the year, Haskell expounds on the workings of seeds, observes the cycle of surrounding maples and hickories, and ruminates on the songbirds that inhabit the forest. His inquiry is open and emergent; the intention is simply to observe what the forest presents without a preconceived agenda, without designs on extracting secrets from the forest. Haskell writes: ‘Leave behind expectations. Hoping for excitement, beauty, violence, enlightenment, or sacrament gets in the way of clear observation and will fog the mind with restlessness. Hope only for an enthusiastic openness of the senses’ (p. 245). The encouragement to open the senses is supported by a contemplative attention to the natural world, as Haskell suggests ‘to borrow from the practice of meditation, and to repeatedly return the mind’s attention to the present moment’ (p. 245). As a biologist, Haskell brings extensive knowledge of local flora and fauna to his investigation, but he also hones a quality of attention that perceives splendour in the common place:

We create wonderful places by giving them attention, not by finding ‘pristine’ places that will bring wonder to us . . . the interior quality of our minds is itself a great teacher of natural history. It is here that we learn that ‘nature’ is not a separate place. (pp. 244–245)

Haskell’s investigation exemplifies a type of study that entails a respectful investigation of the more-than-human world, one that treads very lightly on soil and disturbs little of the flourishing life in the forest. Meditative attention does not replace or contravene scientific knowledge, but serves as a way to attend to the inexhaustible wellsprings of meaning, a form of transcendence beyond the tidiness of fact. This epistemological dexterity that commands knowledge without foreclosing mystery is exactly the kind of skillfulness that the Koan tries to cultivate.

Haskell’s openness to the exuberance of the forest is further supported by other theorists who have argued for a contemplative connection to the ecological world. Heesoon Bai (2013) has forwarded contemplative practice as a way to rediscover an enchantment with the animate world. Speaking to ecologists whose scientific training disposes them to empirical objectivity, Nigel Cooper (2000) has suggested the ‘possibility of direct contact unmediated by language’ (p. 1021). Many Indigenous cultures, of course, have long held that trees and animals have the ability to speak (Beeman & Blenkinsop, 2008; Simpson, 2017). The tree’s ability to speak is often interpreted as a metaphor in Western contexts; but this metaphorical leap distorts the views of Indigenous knowledge holders whose accounts of communication indicate a more literal exchange than what Western observers are able to fathom (Beeman & Blenkinsop, 2008). The capacity to listen deeply to the natural world is not only seen in Indigenous cultures, but also exhibited by children who are ‘ontologically fluid and receptive to the offerings of the natural world’ (Blenkinsop & Piersol, 2013, p. 44).

In their study of ways of listening to the natural world, Blenkinsop and Piersol (2013) present a dialogue with Raven, a fourth-grade student at an outdoor environmental school. Raven mentions that she can talk to plants. Her exchange with a researcher is as follows:

Researcher: 'So do you hear the plant?'

Raven: 'Yeah, but you have to hear it through your heart.'

Researcher: 'I was going to ask where you hear it . . . do it hear it in your heart?'

Raven: 'Little words curl into your mind. You have to know that you're not thinking . . . this sounds funny, you're focused on something but you're not actually thinking about it. If you're thinking than you're not really listening. See I can't do it now when I'm talking.'

Researcher: 'Do you feel like you have "conversations" with the natural world?'

Raven: 'It's not exactly like that, it's not "speaking" it's more like energy or signals. You don't hear it out loud. It's something that your mind and only your mind can understand because nature is that open to any language. So if you were just thinking, not even in your language, just showing pictures, it would still work.' (Blenkinsop & Piersol, 2013, p. 53)

Raven's explanation demonstrates a remarkable capacity for ambiguity and perception beyond the conceptual and delineative language, an affinity that transcends the packages of meaning that comprise intellection. In what sense can one *hear* the plants if the plants do not speak in a human language? If understanding consists of thought, and thoughts arise in the mind, what exactly does the mind comprehend if thoughts disrupt understanding, as Raven seems to suggest? From a logical standpoint, Raven's explanation seems to buckle under the weight of contradiction. There is every temptation to salvage Raven's message by interpreting 'speak' and 'conversations' metaphorically, as if the ambiguous interchange between child and tree can only be rendered comprehensible through the contrivances of conventional language. However, a more intriguing alternative sees Raven's explanation as a poignant Koan, an eloquent and holistic expression of a deep embrace of the natural world that surpasses the logical coherence afforded by everyday language. The natural world speaks, not through language and ideational thought, still the child understands. Better yet, the tree does not speak, and still the child understands. Thus, the correspondence between speaking and understanding is destabilised by the possibility of comprehension beyond rational and conceptual cognition. Raven's immersion in the natural world indicates a kind of communion that confounds the common forms of meaning-making endorsed by Western culture. That a child can articulate this perspective so clearly indicates that a contemplative view of the natural world is neither an esoteric art nor a rare gift enjoyed by a few rare sages.

Koans emerged as an educative tool within a contemplative context as a way to help Buddhist practitioners transcend cognitive dichotomies. For environmental educators, the Koan serves not as a pedagogical method, but as an underlying attitude that holds mystery as living praxis. Praxis, to borrow from Paulo Freire (1993), is the confluence of reflection and action, the interchange between understanding and undertaking. Knowing about the Koan as a device that ameliorates opposites does not constitute an adequate pedagogy; the spirit of the Koan, the attitude it instills, must be practised and lived through experience. Practical utilisation of this contemplative pedagogy might see students going into a wild place with no explicit agenda, no predetermined learning outcomes. They simply open their senses to the nourishment of the more-than-human world. Without judgment, without insisting on unity or otherness, bracketing aside preconceived notions of what 'nature' is and how they are to feel in a wild space, students observe the world as it manifests, in its mundane and ordinary splendour. Exercises of mindful attention are helpful because they connect mind, body and world via an embrace awareness.

With a hand gently placed on the wet, mossy bark of a tree, a student may ask: 'How am I connected or separate from the forest?' By way of response, there is the sensation of moisture

on the fingers, the roughness of the bark, the rooted stillness of the tree — the sensate contact with the tree is in effect a Koan-like response to the initial question. When warm skin meets cool moss, the ‘answer’ to the question of oneness and separateness rises and dissipates in the sensuous contact with the material world. The sensation of the tree becomes the culminating point of cogitative wrangles — this is not an *irrational* response, but a *nonrational* one, wherein the rational mind meets its limit and admits of a wider faculty in which rationality is a constituent member rather than a presiding judge. Somatic contact becomes an immersive experience that invites total participation, calling to a noesis that precedes the voice of reason (Kleinberg-Levin, 2008), and a form of immersion that enlists the body’s affinity with the corporeal world (Abram, 1997, 2010). The forest itself becomes a Koan that transcends the provisional meaning that students ascribes with their conceptual minds. This nonrational, but mindful and somatic experience of the forest allows students to live *with* and *through* rather than *inside* their rational concepts.

Conclusion

This article began with a brief review of the human-nature dichotomy, a perennial topic in environmental philosophy. The prevailing sense of separation from nature, evidenced both in common speech and in collective action, is a compelling force in the ecological crisis. The Koan, hereby presented as a heuristic device, is a way of handling contradictory propositions, not by ameliorating their differences, but by pointing out their partiality as conceptual constructions in a world that cannot be reduced to rational figuration. The Koan holds contradictions while living their fertile tension, a device that points to the inexhaustible store of understanding that awaits the inquirer who does not settle for definitive answers. In other words, the Koan is a container that does not *contain* but is always emptying itself in suggesting that which lies in surplus.

Pedagogically, the Koan furnishes a healthy attitude toward dichotomies and contradictions. Thesis and anti-thesis need not become intractable in their opposition. Students can work through contrapuntal claims and explore their respective merits without rigid adherence to any camp. The attitudes promoted by the Koan are best cultivated in practice, through exercises of exploration that involve somatosensory attention. The practice of listening, touching, smelling, and tasting mindfully is a way of enlisting a broader range of faculties that supply the stuff of experience which invite learners to transcend conceptual bubbles. A pedagogy of the Koan highlights the value of mystery, of not finding ultimate answers, which encourages students to stay with all that eludes final understanding.

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References

- Abram, D. (1997). *The spell of the sensuous: Perception and language in a more-than-human world* (1st ed.). New York, NY: Vintage.
- Abram, D. (2010). *Becoming animal: an earthly cosmology* (1st ed.). New York, NY: Pantheon.
- Bai, H. (2013). Peace with the earth: animism and contemplative ways. *Cultural Studies of Science Education*, 10, 135–147.
- Beeman, C., & Blenkinsop, S. (2008). Dwelling telling: Literalness and ontology. *Paideusis*, 17, 13–24.
- Berman, M. (1981). *The reenchantment of the world*. New York, NY: Cornell University Press.
- Berry, T. (2000). *The great work: Our way into the future*. New York, NY: Broadway Books.
- Berry, T. (2006). *Evening thoughts: Reflecting on Earth as sacred community* (M.E. Tucker, Ed.). San Francisco, CA: Counterpoint.
- Blenkinsop, S., & Piersol, L. (2013). Listening to the literal: Orientations towards how nature communicates. *Phenomenology & Practice*, 7, 41–60.
- Bookchin, M. (1989). *Remaking society*. Montreal, QC: Black Rose Books.
- Bowers, C.A. (1997). *The culture of denial: Why the environmental movement needs a strategy for reforming universities and public schools*. Albany, NY: State University of New York Press.

- Burnet, J.** (1920). *Early Greek philosophy*. New York, NY: A&C Black.
- Cooper, N.** (2000). Speaking and listening to nature: ethics within ecology. *Biodiversity & Conservation*, 9, 1009–1027.
- Descartes, R.** (2008). *Meditations on First Philosophy: With selections from the objections and replies* (M. Moriarty, Trans.). Oxford, UK: Oxford University Press.
- Diamond, J.** (2011). *Collapse: How societies choose to fail or succeed* (rev. ed.). New York, NY: Penguin Books.
- Drengson, A.R., & Inoue, Y.** (Eds.). (1995). *The deep ecology movement: An introductory anthology*. Berkeley, CA: North Atlantic Books.
- Evrnden, N.** (1985). *The natural alien: Humankind and environment*. Toronto, ON: University of Toronto Press.
- Freire, P.** (1993). *Pedagogy of the oppressed*. New York, NY: Bloomsbury Academic
- Grimstone, A.V.** (Ed.). (2005). *Two Zen classics: The gateless gate and the blue cliff records* (K. Sekida, Trans.). Boston, MA: Shambhala.
- Haskell, D.G.** (2012). *The forest unseen: A year's watch in nature*. New York, NY: Penguin Press.
- Kearney, R.** (2011). *Anatheism: Returning to God after God*. New York: Columbia University Press.
- Kleinberg-Levin, D.** (2008). *Before the voice of reason: Echoes of responsibility in Merleau-Ponty's ecology and Levinas's ethics*. Ithaca, NY: State University of New York Press.
- Lakoff, G.** (2010, September 28). On environmental communication. *Huffpost*. https://www.huffpost.com/entry/on-environmental-communic_b_741306
- Lakoff, G., & Johnson, M.** (2003). *Metaphors we live by*. Chicago, IL: University of Chicago Press.
- Leopold, A.** (1986). *A Sand County Almanac*. New York, NY: Ballantine Books.
- Merton, T.** (1999). *Mystics and Zen masters*. New York, NY: Farrar, Straus, & Giroux.
- Montgomery, D.R.** (2012). *Dirt: The erosion of civilizations* (2nd ed.). Berkeley, CA: University of California Press.
- Naess, A.** (1995). Self-realization: an ecological approach to being in the world. In A. Drengson & Y. Inoue (Eds.), *The deep ecology movement* (pp. 13–30). Berkeley, CA: North Atlantic Books.
- Naess, A.** (2008). *The ecology of wisdom: Writings by Arne Naess* (A. Drengson & B. Devall, Eds.). Berkeley, CA: Counterpoint.
- Plato.** (1951). *The Republic of Plato* (F. MacDonald Cornford, Trans.). Oxford, UK: Oxford University Press.
- Plato.** (2008). *Great dialogues of Plato* (W. Rouse, Trans.). New York, NY: Signet Classics.
- Reps, P., & Senzaki, N.** (Eds.). (1985). *Zen flesh Zen bones*. Tokyo, Japan: Tuttle.
- Seed, J., Macy, J., Fleming, P., & Naess, A.** (2007). *Thinking like a mountain: Towards a council of all beings*. Gabriola Island, BC: New Catalyst Books.
- Shepard, P.** (1998a). *Nature and madness*. Athens, GA: University of Georgia Press.
- Sigg, U.** (2016). *Ai Wei Wei* (H. Werner Holzwarth, Ed.). Köln: Taschen.
- Shepard, P.** (1998b). *The tender carnivore and the sacred game*. Athens, GA: University of Georgia Press.
- Simpson, L.B.** (2017). *As we have always done: Indigenous freedom through radical resistance*. Chicago, IL: University of Minnesota Press.
- Suzuki, D.T.** (2000). *The awakening of Zen*. Boston, MA: Shambhala.
- Swimme, B., & Berry, T.** (1994). *The universe story: From the primordial flaring forth to the Ecozoic era*. San Francisco, CA: Harper One Press.
- Tarnas, R.** (1993). *Passion of the western mind*. New York, NY: Ballantine Books.

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