

A Review of Brendon Larson's Metaphors for Environmental Sustainability: Redefining our Relationship with Nature

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Abstract

Brendon Larson's *Metaphors for Environmental Sustainability: Redefining our Relationship with Nature* is a thought provoking treatment of what can be a challenging and sometimes controversial subject. Primarily, but not exclusively, through four feedback metaphors: progress, competition, barcoding, and meltdown, Larson challenges the dominant scientific discourse, highlighting the limits of a single-lens scientific narrative while emphasizing the value of welcoming ambiguity, and diversity as a means to fruitful discussion and inquiry in addressing the issues surrounding environmental sustainability. Furthermore, rather than fencing ourselves off from nature, Larson demonstrates the importance of breaking down narratives of duality, and seeing ourselves as one with nature, not separate from it, in addressing issues concerning environmental sustainability. This book is valuable not only for its message, but also for how its concepts are presented. Larson presents historical and cultural frameworks to contextualize evolutionary and current environmental sustainability narratives. This book exemplifies phenomenological practices and perceptions, and is a valuable and insightful read for any individual, practitioner, or academic with an interest in environmental sustainability.

Introduction

Brendon Larson's *Metaphors for Environmental Sustainability: Redefining our Relationship with Nature* is a thought provoking treatment of what can be a challenging and sometimes controversial subject. Everyone should be concerned with environmental sustainability, yet perspectives about how to ensure environmental sustainability vary according to the individual's context and prevailing cultural values. *Metaphors for Environmental Sustainability* is valuable not only for its message, but also for how its concepts are presented. Larson presents historical and cultural frameworks to contextualize evolutionary and current narratives. His primary means of presentation is via the feedback metaphor that he defines as "a neologism for scientific metaphors that harbor social values and circulate back into society to bolster those very values" (Larson, 2011, p. 22). He uses these metaphors as a means of showing likeness between two different things, making challenging concepts understandable and relatable. Although this book exemplifies

phenomenological practices and perceptions, it is relatively jargon free. *Metaphors for Environmental Sustainability* is a valuable and insightful read for any individual, practitioner, or academic with an interest in environmental sustainability.

Book Synopsis

It is impossible to provide a complete summary of *Metaphors for Environmental Sustainability* in this limited space. The intention of this synopsis is to provide a general overview of the book supplemented with a light sprinkling of relevant text and/or concepts. *Metaphors for Environmental Sustainability* is comprised of: preface, acknowledgements, eight chapters, notes, bibliography and index. Throughout this book, Larson challenges the unquestioning acceptance of pure science. He illuminates the limitations of science by proffering contrasting viewpoints. Larson is balanced in his presentation as he highlights the important contributions of science and human science to the environmental sustainability discussion.

The preface and all chapters open with apt and powerful, thought provoking quotes that speak to the upcoming text. Larson's (2011) preface opens with a quote from Anais Nin, "We don't see things as they are. We see them as we are" which Larson follows with "The way we speak about the natural world is not a transparent window, because it reflects the culture in which we live and its priorities and values" (p. ix). Such rich, stimulating, multi-layered language is typical throughout the book. Within the first paragraph of the preface, Larson (2011) reveals his personal background of "initially being trained in evolutionary ecology then changed fields to examine the confluence of facts and values in our thinking about the environment" (p. ix). He further acknowledges his science background as a "complex way of human knowing" and is "not nature itself" (p. x). The fact that Larson comes from a science background adds credibility to this work. Chapter One, *Metaphor and Sustainability*, welcomes the reader with an anecdotal story. This vignette, while fulfilling every criteria of a van Manen (1990) phenomenological anecdote is especially relevant to the "role of metaphors in science" (Larson, 2011, p. 4). Larson's use of metaphor is the equivalent of the scientific method for the scientist with one exception. Larson's use of the metaphor is more inclusive, whereby science often presents a single lens perspective—an important and welcome contribution to a fruitful discussion on sustainability. Larson (2011) states: "Metaphoric ambiguity may actually be a fertile source of inquiry, and metaphors may allow leaps beyond stabilized meanings that revolutionize the process of scientific exploration" (p. 4). Beyond the metaphor, the chapter also includes foundational terminology and concepts easing into the discussion on environmental sustainability, which Larson defines as "whether our actions will impede or maintain the Earth's ability to support both of our lives and those of other species in the future" (p. 9). The chapter concludes with a detailed six-page summary, highlighting chapters two to seven.

In chapters three through six, Larson examines four feedback metaphors: progress, competition, barcoding, and meltdown respectively. His selection of "case studies are not so much meant to be representative as to demonstrate different dimensions of how metaphors operate at the interface between environmental science and society" (Larson, 2011, p. 24). The distinction between scientific facts and societal values is a long-standing

assumption with any form of merger between fact and values being problematic for science. The hallmarks of pure science include objectivity, detachment and facts. Yet, with each metaphor, Larson (2011) exposes the underbelly of pure science as he provides example after example of entangled values and facts, in what is culturally perceived as value free science. Chapters seven and eight focus forward to what we really want in sustainability and how to get there. Part of this process is recognizing the social dimensions in environmental science, encouraging plurality of metaphors and facilitating open discussion and debate (p. 29). The book concludes with 27 pages of detailed source notes, an extensive 34-page bibliography and a thorough seven-page index. The depth and scope of the notes and bibliography are remarkable, not only because they support Larson's work, but also their value in directing potential readers to alternate sources.

A Critique

The primary thesis of this book is founded in the principle that “environmental metaphors derive from everyday sources, so they reveal to some extent the world view of society that coins them” (Larson, 2011, p. 18). All too often, environmental metaphors are rooted in our cultural context. One example of cultural influence on environmental sustainability discourse is the “authority of science in modern society” (p. 18). This is reflected in society's predisposition to unquestionably accept as true, any science findings boasting an objective and fact focused trademark. The metaphors generated by science ‘silence’ as much as they describe. The authority of science does not invite deeper exploration as it describes cause and effect predictability, which over time become a taken-for-granted notion or truth. Larson's use of silence enhances the message and its impact like well placed punctuation. The author's focus on the metaphor is important in opening up a dialogue and deepening our relationship with the larger living world. In contrast to science, Larson achieves this in part through linguistic pause. *Metaphors for Environmental Sustainability* challenges the authority of science, continually illuminating limitations invisible to the scientist. Husserl (1970) speaks of the subjective perspective in pure science as a “blind spot” for it is invisible, yet the phenomenologist is “freed from such blind spots ” (p. 4). Larson is remarkably thorough and convincing in his chosen metaphors, at highlighting pure science *blind spots*, and areas in need of alternate viewpoints and further discussion. For example, Larson (2011) highlights metaphors that flow from invasive biology stating:

Scientific efficacy against invasive species begins with the constitutive term invasion itself. Invasion is not a neutral metaphor, but a nationalistic feedback metaphor that raises associated fears that our country will be invaded by foreigners and our bodies by disease. (pp. 162-163)

The use of such emotive terminology is partial to the contextual association(s) of the individual reader and cannot be considered to be scientifically impartial as intended for as Larson goes on to state: “And drawing on these cultural associations, invasion is an exemplary performative metaphor because we have difficulty conceptualizing invaders without immediately wanting to do something about them (p. 163). In such cases, as noted above, language use should be challenged, its bias and contextual consequences duly

attributed in considering the purported message or finding. Without multi-lens viewpoints, the single-lens scientific imperative is lacking sufficient foundational support essential to sustaining credibility.

A second example is his metaphor centered on competition. Larson (2011) begins with the historical evolution where he notes: “Before Darwin's time, the natural world may have been seen as frightening, but it was not thought of as competitive so much as harmonious” (p. 67) yet economic growth at this time was competitive with this concept feeding into biology’s ‘survival of the fittest’ and this competitive mindset, leads to everyone being either a winner or loser. Furthermore, “industrial development contributed to a change in our relation with nature from one of cooperation to one of exploitation; it became merely a source of materials for the expansion of human capital” (p. 69), and sustainability will be more achievable with a harmonious, rather than seeing ourselves as “fundamentally competitive and exploitive beings” (p. 69). Ultimately Larson’s discussion contributes to the environmental sustainability debate as he distinguishes: The scientific statement asked the question what “is” and answers with fact, the ethical statement asks what “ought to be” and answers with values (p 69). For me as an outdoor educator and former physical education teacher, this metaphor was multi-faceted and illuminating. Not only did it contribute to my appreciation of environmental sustainability but also to lingering questions and understanding roles and direction for competition and harmony in public school system physical education classes and outdoor education.

Van Manen (1990) notes, “Phenomenologists like to say that nothing is so silent as that which is taken-for-granted or self-evident. Therefore, silence makes human science research and writing both possible and necessary” (p. 112). A principal strength in this book is Larson’s use and analysis of language in dealing with the taken-for-granted in environmental sustainability. In pure science the *facts* become universals, accepted and taken-for-granted whereas in human science research, through Larson’s phenomenological language, the taken-for-granted is explored to reveal more and to invite reflective thought, furthering discussion and debate. Language is a central theme in this book on a variety of levels. Both the power of and limitations of language are manifested in Larson’s use of, and analysis of the language of science. It is apparent from the book’s beginning, that Larson’s personal affinity with language is intimate and profound, not only in the ability to present his message, but also the form and cadence of its presentation. Van Manen (2006) crystallizes good phenomenological writing, stating, “One does not write primarily for being understood; one writes for having understood being” (p. 276).

While metaphor is the backbone of this book, personifying nature is also used to enhance understanding. Larson’s writes with strength and clarity. His use of metaphor precipitates pause, where this pause is often reflective silence. Van Manen (1990) states: “By way of metaphor, language can take us beyond the content of the metaphor toward the original region where language speaks through silence” This path of the metaphor is the speaking of thinking, of poetizing” (p. 49). Larson’s writing exemplifies van Manen’s notions of the strength of language through silence as it induces in the reader powerful moments of silence, reflexivity and connectivity. The silent pause proffers the opportunity for the reader to make their own personal connections, connect the various concepts and see or experience the bigger picture. Larson continually invites debate and discussion as a means to furthering consensus building among variant environmental sustainability perspectives. The silent pause and the use of metaphor are essential components to this

process. Larson's ability to present metaphors phenomenologically in accessible language strengthens the message. For example, when exploring competitive facts and capitalistic values, Larson (2011) opens with a historical discussion, noting that prior to Darwin's *On the Origin of Species*, the perception of nature was harmonious, despite occasional violence. Associated with the popularization of evolutionary theory came the concept of competition in nature such as plants competing for nutrients, natural selection and survival of the fittest (see p. 68). This discussion dovetails into capitalism, its competitive nature, where only the best businesses survive and the weak die off. Larson (2011) notes "some argue that industrial development contributed to a change in our relationship with nature from one of cooperation to one of exploitation" (p. 69) and this competitive, exploitive mentality contradicts environmental sustainability because it induces conflict and a win or lose mindset. If you're not a winner, you're a loser. Furthermore, the cultural prevalence of competitive, capitalistic thinking places environmental sustainability in the background as opposed to the fore. He extends this discussion in very simple language to *what is* (scientific facts) and *ought* (what ought to be) with the metaphorical nexus between the two, representing social resonance and values (see p. 74) elucidating the inclusion of all viewpoints in environmental sustainability discussion and debate. Without such dialogue, there is the danger of self-fulfilling prophecy as Larson (2011) notes: "... it was our perception of competition in the cultural world that contributed to a large extent to our search for it in the natural world. Having found it there, it became the way things are" (p. 75). Larson's language is accessible and he delivers a profound, thought-provoking message. Early in this book, the convention of value-free language as essential to the integrity of pure science is established. Larson (2011) uses metaphors that demonstrate the use of value-laden language in pure science that confuse facts and values. "Most of us would interpret a statement about ecosystem health to be value-laden because we consider health to be a positive feature within a normal personal experience" (p. 75). In this case, where ecosystem health referred to the Great Lakes, health is value-laden to the context of the individual and/or their context making the metaphor what Larson terms "polysemy" (p. 12). When fact and value are blurred, metaphors may have different meanings and thus lack scientific purity.

Another troubling example of value-laden science language is the use of the metaphor "invasive species". Larson (2011) notes: "Invasion is not a neutral metaphor, but a nationalistic feedback metaphor that raises associated fears that our country will be invaded by foreigners and our bodies by disease" (p. 162 – 3). Invasion is an emotive term with cultural associations that invite fight or flight, or an alternate reaction of some form. In Larson's terms it is "an exemplary performative metaphor because we have difficulty conceptualizing invaders without immediately wanting to do something about them" (p. 163). Furthermore such language is divisive, implying boundaries and separation. It is not through division and conflict that we will achieve environmental sustainability. This leads to the question of environmental sustainability, is it a process or a destination? Although this is not directly answered in the book, the implication is both, for without the appropriate process, the destination is unattainable. It is not a one-stop shop moment.

Larson goes on to highlight other value-laden terms used by environmental scientists that inculcate fear. Invasional meltdown, biological invasions and mutational meltdown are terms that advocate with fear. They are not value free, are likely to instill a response, but is it the effect we seek. Larson (2011) notes: "social psychologists have shown that

extremely intensive language or images used for the purposes of persuasion can have an opposite effect on the receiver, which they have christened the boomerang effect” (p. 170). Health, invasion and meltdown are just a few examples of environmental metaphors “that blend facts and values, thereby circumventing the hallowed distinction between them” (p. 75).

The message in *Metaphors for Environmental Sustainability* is clear, well documented, and timely. The one area that may make the book more accessible is the use of a legend with figures 7, (p. 77) and figure 8, (p. 80) to ease the novice interpretation. If the target audience is strictly academics, the figures in their current form are suitable.

Conclusion

Metaphors for Environmental Sustainability is an accessible academic and relevant work. This book is more about eliciting dialogue and creating a productive process towards sustainability rather than presenting the latest state of the environment or preservation dogma. Furthermore, within this construct, Larson encourages varied viewpoints, and inclusive of human and other species’ perspectives, as a catalyst for the discussion necessary to resolving our current environmental sustainability dilemma. Larson (2011) notes, “the ultimate concern in this book ... is whether the environmental metaphors we use in environmental science nurture sustainability” (p. 96). In order to achieve sustainability a cooperative mindset of being together in the process is indispensable. *Metaphors for Environmental Sustainability* offers an individual and sometimes unique perspective; providing many nuances that propose new prospects for phenomenological enlightenment in the area of environmental sustainability, for the first-time reader and advanced scholar alike. Its contribution to the field of environmental sustainability is fresh with great potential and mounting hope.

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