

Constructing Sympathy's Forge:
Empiricism, Ethics, and Environmental Education in the
Thought of Liberty Hyde Bailey and John Dewey

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There is no royal road to learning through an airy path of brilliant generalizations.¹

A peculiar situation prevails in much of environmental philosophy, understood as that movement in philosophy that undergirds and supports environmental activism. Although environmental philosophy has committed itself largely to establishing foundations for value in the non-human world, it is colored by a great distrust of empiricism.²

Why and/or how has this situation come about? There may be several reasons. We might begin by looking back to the formative years of today's environmental philosophy, the 1960s. One characteristic of that era was a renewed and greatly heightened sense that empirical science itself was to blame for our environmental woes. Rachel Carson's exposé of the dangers of chemical pesticides was seminal in fostering this awareness. Science, with a capital "S," was identified with the Establishment (with a capital "E"), thus to be anti-Establishment required to a large degree that one be anti-science.³

Of course, empiricism is perhaps not identical with science as it is generally practiced, or at least not with the science which generated the problems that awakened the movement in the 1960s. Perhaps, then, a broadening of the concept of empiricism beyond a narrowly reductionist scope would do the trick. Let us then consider empiricism to be an approach to acquiring knowledge (including such knowledge that can guide action in the world) characterized by starting with where we are, that is, with human experience, including sense perception, emotional and aesthetic feelings, as well as the traditions of past human experience. A method for evaluating experience known as the "scientific method" can be utilized to generate guiding principles — knowledge of our world, and knowledge of how best to act in that world. Environmental philosophy's concern may not, therefore, be with empiricism broadly conceived, but only with reductionist science. Unfortunately, I do not believe it is as simple as that.

Beyond merely neglecting or distrusting empiricism, environmental philosophy seems to have actively embraced empiricism's epistemological opposite, rationalism. Environmental philosophy is an exercise in moral philosophy, concerned with values and rules for conduct. Since it has been often asserted that empirical study can give us no purchase on ethical matters, environmentalism has, perhaps unconsciously, embraced an approach that does not rely on the uncertain data of experience. Rationalism is an approach to knowledge that seeks to deduce knowledge from first principles or *a priori* general ideas — principles acquired or obtained *prior to* any actual human experience. Rationalism is the epistemological stance opposed to the idea "that ethical principles are grounded in or derive from

emotion, empathy, or some other non-rational foundation.”⁴ Rationalism denies that ethical principles can obtain from experience.

A rationalist approach seeks to ground its ethical theory on some first principle (or principles); it utilizes some unifying concept — some generalization — to organize all subsequent thought. A unifying concept that has been widely utilized in environmental philosophy is *ecological holism*, which, regardless of how it was originally derived, has been elevated to the status of an unassailable first principle which only the philistine dare question. What this first principle implies (indeed, what rationalist thought often tends toward) is a *monist* metaphysics, such as that of Spinoza, Hegel, or perhaps that found in East Asian philosophical traditions (It is therefore no coincidence that Spinoza and Eastern thought are so frequently invoked in environmental philosophy.) A monist system of thought emphasizes the whole; as William James observed, it seeks to explain parts by that whole.⁵

Ecological holism may be an extremely valuable idea, but how does it operate as a first principle for ethics? Considered simply as the notion that we are all a part of one grand whole — be it the earth, the universe, or whatever — it is a truism, and does not tell us anything new or useful about ourselves or the world. Its derivation is uncertain since no human being can observe or experience this whole *as a whole*, except perhaps in rare and intermittent mystical experiences. Wholeness can only be inferred from more fragmentary experience. When adopted as a first principle, holism, then, tends to take the form of an *a priori* categorical imperative, a dogma, something to be taken on faith. The teaching of environmental ethics then reduces to the teaching of an environmental catechism, dependent on the authority of the teacher for its sway.

What alternative does an empirical approach offer? That is what I will explore first by a consideration of the work of Liberty Hyde Bailey, an obscure but significant figure in the history of environmental education, and then through an examination of the “naturalistic empiricism” of John Dewey.

LIBERTY HYDE BAILEY

Liberty Hyde Bailey (1858-1954), a botanist and educator, pursued a rich and varied career. Not only did he undertake much original research in botany, horticulture and agricultural science, but he was also extremely active in the promotion of agriculture as a subject fit for study in the nation’s universities and post-secondary colleges. Among the highlights of his career as an educator was his tenure as Dean and Director of the New York State College of Agriculture at Cornell University (from 1903 to 1913) and his role as the chairman of President Theodore Roosevelt’s Commission on Country Life (1908). He was among a generation of progressive educators who sought to make formal education relevant to students’ lives and experience. His own experiences growing up on a farm led to his deep involvement with practical agricultural education. But his interest went beyond the scientific and technical: He had a particular concern for the social, cultural and spiritual well-being of rural Americans, and by extension, all citizens of earth. Befitting his own background as a botanist — someone deeply involved in the broadly empirical endeavor of natural history — Bailey’s approach to what today we would call environmental ethics was distinctively empirical and experiential.

At the end of the nineteenth century, the onward march of industrialization and urbanization in America, with its attendant intermittent economic crises and crashes, closely paralleled the dawning public realization of the limits and fragility of America's natural landscape. These forces, coupled with Bailey's own experiences with the study of botany, led to his involvement with a movement advocating the study of natural objects and processes in the rapidly expanding elementary school system in the hopes of remedying the growing cognitive and ontological disconnection he observed.⁶

In his involvement with the development of nature-study programs for children throughout New York state and through a series of essays and books, Bailey expressed his views on how best to heal this disconnection and to obtain a fruitful relationship with the wider world. In the *Nature-Study Idea*, Bailey propounded nature-study — first hand, in-the-field experience with nature — as the best way of instilling a moral regard for nature. He described it as a “fundamental and... general educational process” and as “experience teaching.”⁷ Echoing the popular ideas of Rousseau, the motto of Bailey and his associates was “teach Nature, not Books.”

Nature-study was not solely about generating scientific knowledge or encouraging budding young scientists. Bailey felt that such experiential study affected one's quality of life and ethics. He described what he had in mind in this way:

Nature may be studied with either of two objects: to discover new truth for the purpose of increasing the sum of human knowledge; or to put the pupil in a sympathetic attitude for the purpose of increasing his joy of living. ...[Nature-study's] purpose is to enable every person to live a richer life, whatever his business or profession may be.⁸

By taking up the cause of nature-study and by arguing that it be considered as something distinct from the acquisition of scientific and technical knowledge, Bailey acknowledged a different human need beyond mere material sustenance and a different instrumentality for nature.

According to Bailey, this second purpose to which the study of nature can be directed is explicitly described as putting the student into a “sympathetic” relation with nature — with one's non-human environs. (And implicit in his discussion is the idea that it is possible to be in an “unsympathetic” relation to nature — to be disconnected.) Here he drew from his own experience joining in the fraternity of botanists as a young man. In a letter to one of his botanical correspondents early in life, he described this spiritual community of plant lovers:

By the way, these botanists are always friendly, kind-hearted people, are they not? Of all I've met there seems yet to be no exception. And of course they are enthusiasts. How could they be otherwise? A thorough and enjoyable acquaintance with Nature must always awaken a man's sympathy, and his ambition to know more of the great, inspiring truths with which she is over-laden.⁹

Bailey had an abiding enthusiasm for the particularities of nature, an enthusiasm that made certain ethical claims upon him. It was this enthusiasm that Bailey wished to convey to younger generations. However, such conveyance did not depend on preaching some timeless truth about the value of nature or its underlying unity. Rather, by fostering first-hand experience and a careful attention to details, Bailey hoped to encourage personal connections with the non-human world. Clearly Bailey saw this as an inductive process, as *empirical*.

Understanding Bailey's take on the educative force of nature-study depends on understanding what he meant by "sympathy." The usage of this word has altered over the years, and we must thus try to reconstruct a sense of its force and meaning in Bailey's time. First, it might simply mean "empathy:" an ability to be aware of, have an understanding of or be sensitive to the feelings of the other. Adam Smith and other eighteenth-century thinkers used the term sympathy to denote this sort of "fellow-feeling" and a capacity to imaginatively place ourselves in the place of the other.¹⁰ I suggest, however, that Bailey has a more thorough-going sameness of feeling in mind than is meant by empathy. We might simply look to the root of the word — "same + feeling" — and also consider one of its technical uses: when one string on a musical instrument causes a neighboring string to vibrate at the same frequency, the resulting vibration is referred to as "sympathetic vibration." Sympathy may be likened to consonance, harmony or unison, and implies shared feeling and connection.

Bailey's plea that we strive to place ourselves into sympathy with nature may be seen as a request that we strive to obtain consonance, harmony, or unison with the processes of the non-human world. It implies that dissonance, discord, and thus disconnection are very real possibilities, even prevalent realities. Bailey further argued that attaining sympathy and thus fruitful, harmonious relation requires more than good-will or good intention, but also direct attention to the details of nature, on understanding. Thus, Bailey, contrary to dominant trends in moral philosophy, argued that non-human nature can give us guidance on how to *conduct our lives* — on *ethics*.

Nature-study, as Bailey conceived it, is thus a form of moral education, but not a form that relies on moral exhortation or that demands adherence to rules dictated from the top down. Rather it forms, through direct personal experience, the individuals' connection to the world and his responsibility with regard to that world, where responsibility should be read as "response-ability" — an ability to respond in a fruitful way.¹¹ For Bailey, the outcome of this endeavor is itself very practical and indicative of its moral relevance. He wrote:

There is a large public and social result of simple and direct teaching of common things. It explains the relations between man and his environment. It establishes a new sense of our dependence on the natural resources of the earth, and leads us not to abuse nature or to waste our resources. It develops a public intelligence on these matters, and it ought to influence community conduct. All teaching that is direct, native, and understandable should greatly influence the bearing of the individual toward his conditions and his fellows, awaken his moral nature, and teach him something of the art of living in the world.¹²

DEWEY'S NATURALISTIC EMPIRICISM

Let us now turn to Dewey in search of the language that will help us understand more fully the work that Bailey set out to accomplish. Almost an exact contemporary of Bailey, Dewey began his professional career as a neo-Hegelian idealist eager to overcome the dualisms he observed in life and to achieve a unity of thought and action often characteristic of rationalistic and monistic systems. In this respect, Dewey had a lot in common with today's environmental philosophers. But as he matured, he embraced empiricism as the best method for philosophical investigation

as well as for education and for dealing with the problems of life. He thus abandoned much of his Hegelian ideas without losing an abiding desire to eliminate the pernicious dualism prevalent between humanity and non-human nature.

Dewey's advocacy of experience in education is well known. Given this advocacy we would expect him to be favorable toward the type of education Bailey promoted, and in fact he did voice his approval of nature — study in an address to the American Association for the Advancement of Science in 1910.¹³ What Dewey found particularly valuable about nature-study was its promise as a way of teaching about *methods* of knowledge production. He wrote that

such knowledge [of method] never can be learned by itself; it is not information, but a mode of intelligent practice, an habitual disposition of mind. Only by taking a hand in the making of knowledge, by transferring guess and opinion into belief authorized by inquiry, does one ever get a knowledge of the method of knowing.¹⁴

But Dewey also considered empiricism a valid approach to philosophy itself, and therefore to ethics. In *Experience and Nature* he argued for an empirical approach (which he referred to as “naturalistic empiricism”) and described the naturalistic metaphysics to which he felt such an approach leads.¹⁵ It is here that we can turn in considering how an empirical approach to environmental education and ethics could work.

We first need to consider how Dewey characterized experience and thus empiricism. He emphasized:

It is not experience which is experienced, but nature — stones, plants, animals...things interacting in certain ways *are* experience; they are what is experienced. Linked in certain other ways with another natural object — the human organism — they are *how* things are experienced as well. Experience thus reaches down into nature; it has depth (*EN*, 4).

In urging us to consider this definition of experience, Dewey was characteristically attacking the dualism represented in his title: that between human experience and nature — non-human reality. As the quote above suggests, experience provides the link, the *connection* between human and non-human. If we are connected to nature at all, it is *through* experience: experience both *is* that nature *and* something we possess.

In effect, Dewey argued that empiricism should be more broadly conceptualized than it often is. Dewey, like present day environmental thinkers, was eager to avoid reductionist approaches to the world. Empiricism should not be considered in a narrow, materialistic, or technical sense. Rather, empirical data must include feelings:

If experience actually presents aesthetic and moral traits [and Dewey claims that it does], then these traits may also be supposed to reach down into nature, and to testify to something that belongs to nature as truly as does the mechanical structure attributed to it in the physical sense (*EN*, 5).

Dewey was arguing for values in nature, something I will return to shortly.

In describing a model for an empirical approach to philosophy, Dewey said that we begin with the data of primary experience — life experience; we then engage in reflection on this experience — a form of “secondary experience” — and we then return to primary experience to test our reflections. This is, of course, a version of

the scientific method. Experience forms both the beginning and the terminus of the process. But Dewey was thinking not only in terms of material science but also in terms of feelings and values. What if our ethics or morals, our generalized principles of conduct, our values, were formed, reflected upon and tested in this way?

Dewey described how a philosophic system or a philosophic idea may be tested in this way (What else is a general principle of action — an ethic — but a philosophic idea?):

Does it end in conclusions which, when they are referred back to ordinary life experiences and their predicaments, render them more significant, more luminous to us, and make our dealings with them more fruitful? (*EN*, 9-10.)

Like Bailey, Dewey wanted us to cultivate “fruitful” relationships with the world, and the best way to learn this “art of living in the world” is through attention to concrete experience.

Delving a little deeper into what sort of “naturalistic metaphysics” Dewey believed his method suggested will help us gain a stronger grasp on what both Dewey and Bailey had in mind as self-proclaimed empiricists. Rationalism as an epistemological stance tends to suggest certain idealistic concepts about the ultimate nature of the universe. One such view is some form of dualism where the ideals (especially moral imperatives) are separated from the messy world of experience. If the thinker is keen to get around the difficulties engendered by such a separation, then the world is proposed as some form of unity — a monistic concept which considers different categories of being as only different ways of talking about one substance (For example, Spinoza’s equation of God with the world.) Dewey followed neither route.

Rather, what he believed an attention to concrete human experience suggested was a pluralistic world — a world consisting of both the “precarious” *and* the “stable” — a world in constant flux. In this, he had much in common with both James and Alfred North Whitehead (*EN*, 37-66). In speaking of the rationalistic approach to philosophy he emphasized the messy nature of reality — a messiness that the rationalists sought to avoid:

Gross experience is loaded with the tangled and complex; hence philosophy hurries away from it to search out something so simple that the mind can rest trustfully in it, knowing that it has no surprises in store, that it will not spring anything to make trouble, that it will stay put, having no potentialities in store. ...[for example,] there is Spinoza with his assurance that a true idea carries truth intrinsic in its bosom (*EN*, 25-26).

In a tangled world such as Dewey described, human beings strive to encourage some aspects of that world while discouraging others. The idealistic systems of thought hypostatize the desired aspects. What we in fact work for, according to Dewey, is the substantiation of frail goods, the extension of secure goods and the fulfillment of promised goods (*EN*, 66).

Here we meet up with one of the primary objections voiced by environmental thinkers to a Deweyan approach to environmental ethics. What has just been said is taken as evidence of the hopeless anthropocentrism of Dewey’s thought. What the objection in turn indicates is the extremely rationalistic and anti-empirical (anti-experiential) nature of Dewey’s environmental critics.

Non-anthropocentrism is an idealistic fiction. In a boundless universe known only to us through experience, every experiencing individual is a center. To strive for an un-*anthropos*-centered view of the world is to strive for a privileged, disembodied, view-point — a god-like view. Such a viewpoint is not available to us.

In taking his position, Dewey did *not* state that there are no values in nature. Dewey explicitly placed values in nature (*EN*, 321). The problem is that such values in nature are incommensurable. Each value simply *is*. In a pluralistic world, every occurrence in the human-nature manifold is an expression of a value; the problem for us is to decide which values to *prefer*. Which fragile values in nature do we wish to substantiate, which secure values do we wish to preserve, and which possible future values do we wish to work to bring about? Likewise, which values do we wish to limit or eliminate? Thus what we need, according to Dewey, is a theory of criticism (*EN*, 321). For although all values are incommensurable in their immediacy of being, they are not all equal in their instrumentality for future values. Criticism compares values on the basis of their bearing for the future. We must decide what future realizations of value we want. There is no escaping this burden of responsibility by reference to some *outside* authority. As Bailey reminds us, it is *we* who, like it or not, have “dominion” over the earth, a role which is not a “commission to devastate” but a grave moral responsibility to foster those values critically preferred on the basis of their ability to sustain present values and produce future values.¹⁶

Was Dewey really in concord with Bailey in these matters? Evidence abounds that Bailey's primary concern, like Dewey's, was human well-being, and beyond that, it is clear that Bailey himself felt that well-being necessitated the perpetuation of certain values in nature, be they material, aesthetic or spiritual. Bailey is no alternative, in this respect, to Dewey as some have suggested.¹⁷ An observer referred to Cornell's State College of Agriculture under Bailey's leadership as “Human Welfare College,” a characterization that Bailey did not quibble with.¹⁸ Bailey also truly valued the non-human, not only for its clear role in putting food on the human table, but as something the experience of which would increase the “joy in living” and the “richness of life” — very important aspects of human well-being.

Bailey was quite clear in expressing the way he valued nature, perhaps quite a bit more so than Dewey. But the methods each expressed are basically the same: There can be no ethical regard for the “environment,” or non-human nature, without concrete experience of it. The task of the environmental educator is clear. We must foster concrete experience of the non-human world. Dewey and Bailey gave us a method for learning from this primary experience.

Those who take Dewey to task for not caring enough for the environment overlook the power of his method. Who is to say, that if living another lifetime, Dewey would not have developed a carefully considered environmental ethics by following the path he cleared so long ago? This is not as wild an idea as it might seem at first glance. For, in fact, Bailey and Dewey are connected in another, more visceral way. Late in life, Dewey indicated the tremendous influence Bailey's writings had on him. A Bailey passage (unidentified) that Dewey quoted in a speech shortly after

his ninetieth birthday was described by Steven C. Rockefeller as “significant because it reveals how Dewey’s piety toward nature and his Darwinian naturalistic modes of thought were leading him in 1949 to embrace the spirit embodied in the kind of ecological worldview that was to become popular in the 1970s and 1980s.”¹⁹

However, it is for us, in our own words, to carry on the work of constructing sympathy’s forge, begun by Bailey and Dewey. The task has not nor will be easy in this age of distance learning (the nemesis of “sense of place”), the “virtual college,” the imminent demise of natural history as a subject of study from kindergarten through the University, and a thousand other distractions and separations from the living earth.²⁰ Indeed, we may well wonder, after forty-odd years of environmental awareness whether we have made any progress at all. Are we, today, in sympathy with nature?

1. Alfred North Whitehead, *The Aims of Education and other Essays* (1929; reprint, New York: Free Press, 1967), 6.

2. For evidence, see how Donald Worster, *The Economy of Nature: A History of Ecological Ideas*, 1977 (Cambridge: Cambridge University Press, 1985) levels against empirical thinkers; and the characterization of the ecological worldview in opposition to empiricism found in Paul A. Morgan, “Liberty Hyde Bailey: Pioneer and Prophet of an Ecological Philosophy of Education” (Ph.D. diss., Columbia University, 1998).

3. Such anti-establishment rhetoric persists in many environmental circles; witness Martin J. Walker, “Your Money And Your Life?” *The Ecologist* 30, no. 7 (October 2000): 24-28, in which the author takes the “cancer establishment” to task.

4. Robert Audi, ed., *The Cambridge Dictionary of Philosophy* (New York: Cambridge University Press, 1995), 673.

5. William James, *A Pluralistic Universe: Hibbert Lectures at Manchester College on the Present Situation in Philosophy*, 1909, in *Writings 1902-1910*, ed. Bruce Kuklick (New York: The Library of America, 1987), 633. Carolyn Merchant evinces the rationalistic leanings of environmental thought when she stresses, as James described, that in an organic (ecological or environmental) world view “the whole is greater than the sum of the parts,” a statement which implies that we should place definitive explanatory power in that whole. *Radical Ecology: The Search for a Livable World* (New York: Routledge, 1992), 65.

6. See Liberty Hyde Bailey, *The Outlook to Nature* (New York: Macmillan, 1905).

7. Bailey, *The Nature-Study Idea: An Interpretation of the New School-Movement to Put the Young Into Relation and Sympathy With Nature* (New York: Macmillan, 1909), 5, 4.

8. *Ibid.*, 5.

9. L.H. Bailey to Charles F. Wheeler, Feb. 16, 1882. Folder 17, Box 1, Bailey Papers, Cornell University.

10. Adam Smith, *The Theory of Moral Sentiments*, 1759, in *The Essential Adam Smith*, ed. Robert L. Heilbroner (New York: Norton, 1986), 65ff.

11. Gabriel Moran, *A Grammar of Responsibility* (New York: Crossroad Publishing, 1996), 37.

12. Bailey, *The Nature-Study Idea: An Interpretation of the New School-Movement to Put the Young Into Relation and Sympathy With Nature* (New York: Macmillan, 1909), 57.

13. John Dewey, “Science as Subject-Matter and as Method,” *Science* 31, no. 125, 28 January 1910.

14. Dewey, “Science as Subject-Matter and as Method,” quoted in Richard R. Olmsted, “The Nature-Study Movement In American Education,” (Ed.D. diss., Indiana University, 1967), 98.

15. John Dewey, *Experience and Nature*, 1925. Second Edition revised by author. (LaSalle, Ill: Open Court, 1929). This book will be cited as *EN* in the text for all subsequent references.

16. Liberty Hyde Bailey, *The Holy Earth* (1915; reprint, Ithaca: New York State College of Agriculture and Life Sciences, 1980), 17.
17. Morgan, "Liberty Hyde Bailey: Pioneer and Prophet of An Ecological Philosophy of Education."
18. Francis E. Clark, "Human Welfare College," *Christian Endeavor World*, 10 July 1913. Observed in Folder 3, Box 8, Bailey Papers 1400, Cornell University Archives.
19. Stephen C. Rockefeller, *John Dewey: Religious Faith and Democratic Humanism* (New York: Columbia University Press), 559.
20. See David S. Wilcove and Thomas Eisner, "The Impending Extinction of Natural History," *The Chronicle of Higher Education*, 15 September 2000, B24.