

# A DEWEYAN APPROACH TO ENVIRONMENTAL LAW

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John Dewey says that our existence, and hence nature, is both precarious and stable.<sup>1</sup> As inhabitants of nature, or more precisely as intelligent creatures in constant transaction<sup>2</sup> with our environment, we are aware of our complete dependence on nature for our needs, the aesthetic value it holds for us, and our ability to control our environment (to an extent) in a way that is pleasing to us. Humans are not just “in” nature; rather, we are “of” nature, sharing growth, history, events, processes, change and continuity with our environment.<sup>3</sup> Upon reflection of early human survival, it becomes increasingly evident *how* we have gotten where we are in regard to our relationship with nature, and more importantly, perhaps, that it might have gone just as easily one way as the other.<sup>4</sup>

With the increasingly precarious state of our environment, our courts are seeing more, as well as more complex, cases whose decisions are bound to have an impact on our environment. Because of our unique capacities (imagination, intelligence, ability to exert control, and most importantly our decision-making abilities) as humans, I argue that we are responsible for the environment of the future, and that nature, and thus humans, can benefit from adoption of Dewey’s ethics, moral thought, and method. This adoption would by no means completely resolve all environmental issues we are now facing, but, as Dewey says, “[It] would enable us to state problems in such forms that action could be intelligently directed toward their solution”<sup>5</sup> and work toward the benefit of all.

From a Deweyan standpoint, as moral agents “in” and “of” nature we must look at the welfare of the entire biotic community as part of human welfare. To assume that his moral ethics cuts human beings off from the rest of nature would be a misreading of Dewey, for he argues that humans are part of nature—inseparable. Thus, although humans are the “sole moral agents,”<sup>6</sup> moral deliberation that fails to take all of nature into account is intrinsically faulty.<sup>7</sup> In this paper, I will explain why Dewey’s ideas may be used successfully to approach environmental law, including how the judiciary

system might benefit from a Deweyan perspective. Before closing, I will conduct a short, specific case study of a legal precedent that challenges environmental integrity in our court systems, *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, including a discussion of the potential benefits of the adoption of Deweyan pluralism for future legal outcomes in such cases.

Our inquiry in experience is conducted in the world, as it is inhabited in the way nature manifests itself through our living. For Dewey, objects are not limited to human interaction; they reveal the structure of the world, emerging from and through interaction with the world. In the environment, objects are functions. Dewey's method has us select and focus upon aspects of the environment because we inhabit or are involved in it; they are significant to ongoing activity. Dewey focuses on continuity, and thus, his denotative method is concerned with bringing the entire dimension of a "situation" to light as an interconnected web involving transaction, not just bits and pieces of sense data.

Contextualizing an idea within the realm of experience, history and life in general, one should ask, "what difference does 'x' idea make for life," rather than asserting, "my knowledge of the world is 'y.'" Dewey is saying that we do not find a division of experience and nature in science, but it is useful for finding practicality for ideas. He puts science into a larger context by promoting examination of previous experience in the light of science; he then brings it back to experience to find practicality. Thus, the denotative method is important for Dewey because it frees us from rigid attempts at fitting qualitative experience into theoretical pigeonholes. Dewey is concerned with what he would hold as a fundamental error in moral inquiry. He finds that moral discourse that starts from a linguistic point, or moral "beliefs," is incorrect.<sup>8</sup>

Dewey's view of the importance of the non-cognitive is compatible with his disdain for using theory as a starting point of inquiry. It is improper to begin outside of experience, when experience is infused in every aspect of our beings. We are given, as such, to an empirical moral inquiry where we are not reduced to forcing concepts into a "rigid framework." To assume some "real" antecedent as a starting point is faulty reasoning, and leads to fallaciousness. In other words, by demarcating specific rules for action or conduct antecedent to experience, we are selling short the essence of morality. Concrete, inherent rules imply (rather, should imply) that there is a fixed course of action for every possible situation. Our experience shows this to be an inaccurate account of what is involved in everyday existence. Just as in nature, there are stabilities and instabilities in moral experience which to varying degrees constitute its essence. Hence, Dewey's moral empiricism is fitting for such fluidity, rather than strict theoretical approaches.

Dewey is a "value pluralist,"<sup>9</sup> placing importance on multiple ends, a variety of ends as "natural goods."<sup>10</sup> As a pluralist, he thus recognizes that extension of consideration for all of nature, including functions of nature, other organisms and their activities, and the importance of the overall cooperation of the natural world and its inhabitants to support life and support the overall health of the environment. As such, value may be placed on anything in nature: processes, diversity, cooperation, and anything designated as contributing to the overall health of the environment. For example, even predatory creatures are valuable. Although they may be seen as destructive, in

the short term, they actually serve in the grand scheme of the overall health of their habitat by thinning out herds, reducing spread of disease by taking out sick members of a herd, and, thereby, contributing to the smooth function and health of the environment. Determining that a predator or any other aspect of the environment has value is part of a process called “valuation.”<sup>11</sup>

The imagination is important in Deweyan moral thought, for it allows one to “see the actual in light of the possible, and, thereby, be responsible toward liberating the ideals of conduct which, in turn, give a fulfilling continuity, meaning, and coherency to action.”<sup>12</sup> Imagination plays a crucial role in Dewey’s notion of ends-in-view. Agents, as conscious, active participants in nature and involved in moral inquiry, concentrate their efforts on restoring continuity to experience when habits are interrupted. It is the means by which intelligent decisions are made in the process of valuation. Alexander eloquently states that, “Intelligence blossoms forth in the passionate desire for objective, embodied completion. Imagination is thus a condition for any intelligent action.”<sup>13</sup>

Thus, problematic situations are identifiable for the morally intelligent agent, and the imagination serves as the means for remedying the problem by allowing one to envision the outcomes in light of various options for action. In this way, the agent is able to choose the best possible mode of action, learn from the experience, and through reflection later on, determine if that action was appropriate or should be reconsidered. As situations change, the moral agent must be vigilant, and constantly reflective in order to determine if improvements can be made to fine-tune the means employed in the event that the ends-in-view were not the intended outcome. As such, to express it as “pragmatic imagination”<sup>14</sup> is indeed fitting.

If we examine our habits, engage in valuation of what we hold important, and commit ourselves to moral inquiry, perhaps we might see more clearly the possibilities, both positive and negative, that our actions have for the welfare of the environment. We are certainly aware of natural changes that occur with our environment. But we should be more aware, or at least not deny, that our habits and actions must contribute to negative changes and loss of biodiversity on a global scale. We must also consider the “BRIC” countries (Brazil, Russia, India, and China) that are not yet developed, and are close to exceeding developed countries in their appetite for industry, goods, and natural resources. With booming populations and intense need for improvement of infrastructure, is it fair to discourage or deny them pursuit of what they need in an effort to mitigate the damage that already developed countries have inflicted upon the environment?

This question is difficult to answer. Perhaps if we look at the situation from a moral standpoint, using our imaginations to see possible outcomes with particular courses of action, we can identify useful ideas and perhaps even answers to nature’s problems. Dewey’s holistic naturalism is useful for us in this sense: by adopting the holistic outlook, we will be inclined to own up to our roles in nature—both positive and negative aspects—and see our actions as part of a process that has resounding and lasting effects that extend further than we currently think. Simply understanding and educating ourselves in the amount of natural resources used to create the products and daily comforts we enjoy can cause us to rethink our values.

Thus, I propose that a Deweyan holistic approach to environmental law would be beneficial for us, as moral agents, to engage in. McDonald says, “Practice should rightly cover all activity; practice should be coextensive with morals.”<sup>15</sup> Thus, since Dewey promotes the separation of theory and practice, and practice entails experimentation, his organic method of moral inquiry is well suited for developing environmental law. Although consistency is important in the legal realm, Dewey’s opinion is that it can also be a hindrance because we do not live in a static environment, and it can reduce or eliminate the experimental nature of law. Experimental nature is important in the context of an ever-changing world and as such, is especially important for environmental law. Although mechanical jurisprudence ensures consistency, it is a stale and strictly theoretical approach to decision making. A Deweyan approach to law, on the other hand, would aim at promoting the practicality of law.

The landmark 1993 Supreme Court ruling in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*<sup>16</sup> brought state and federal judges into a proverbial scientific spotlight, consequently casting long shadows of doubt concerning the extent of their knowledge and comprehension of methodology, soundness, and reliability of all things scientific that enter our courtrooms. The *Daubert* ruling was salient in that it set a new standard for evaluation of scientific evidence in the courtroom. During *Daubert* the Supreme Court examined the Federal Rules of Evidence (FRE), thought to be insufficiently explicit in cases based on science<sup>17</sup> which led to the establishment of a two-pronged approach aimed at testing reliability and relevance. The approach was intended to aid in evaluation of proffered expert evidence, and hence, the Supreme Court appointed judges the “gatekeepers” of scientific evidence.<sup>18</sup>

Expectations were that *Daubert* would successfully prevent inclusion of “junk science”<sup>19</sup> for evidentiary admission and ensure that scientific validity and sound methodology were the basis for evidence presented during expert testimony. The precursor method for determining whether or not scientific evidence met required standards was minimally based on relevance of evidence to the particular case and the *Frye* standard<sup>20</sup> which was issued from a ruling in 1923. The additional guidelines of the *Daubert* standard now subject the testimonies of experts and scientific evidence to a more sophisticated examination; the *Frye* standard merely queried whether or not *other* scientists had previously used the scientific approach in question.

As gatekeepers—a role that appears to be taken very seriously<sup>21</sup>—judges review expert testimony and scientific evidence before allowing juries to hear cases during a “*Daubert* hearing.” In order for judges to assess information under the new standards, the court offered the following nonexclusive guidelines: (1) testability—has the method been tested, or can it be tested? (i.e., falsifiability); (2) error rate—referring to either the known error rate or the potential error rate; (3) acceptance—has the methodology been accepted in the scientific community?; (4) peer review/publication. If these guidelines seem very general in nature, it is with good reason. The purpose is to maintain flexibility.<sup>22</sup> It is important to note that *Daubert* hearings can be a critical turning point for either petitioner or respondent; evidence is crucial to any case, and loss of the use of expert witnesses or scientific substantiation can have detrimental affects on outcomes, particularly by increasing the probability of summary judgments.

As of 1999, due specifically to the proceedings and outcome of the *Kumho Tire Co.*

*v. Carmichael*<sup>23</sup> litigation, use of *Daubert* standards to assess expert testimony has no longer been limited to strictly scientific evidence and testimony, but extended to any expert testimony as judges see fit.<sup>24</sup> In *Kumho*, the presiding judge applied the *Daubert* standards, interpreted to be applicable according to Rule 702, to expert testimony that was experiential and technical or non-scientific. Subsequently, the expert testimony was deemed inadmissible and a summary judgment was issued. Interpretation of *Daubert* was not stringently established, and the inconsistent application thereof moved the Respondent to appeal. The U.S. Court of Appeals for the Eleventh Circuit then reversed the order. Ultimately, the Supreme Court granted certiorari and reversed the Eleventh Circuit decision in favor of Plaintiff Kumho.<sup>25</sup>

A justification for the reversal of the Eleventh Circuit decision, markedly adding to the uncertainty surrounding interpretation of *Daubert*, may be posited as follows: There is no “bright-line” demarcation between technical or specialized knowledge (frequently considered non-scientific), and scientific knowledge. According to a comparatively liberal interpretation of *Daubert*, the standards are flexible enough to apply to *any* expert testimony—a view that is contested, especially by those petitioners challenging respondents in product liability litigations.<sup>26</sup> Arguably, under such a potentially broad spectrum of interpretations, there is substantial room for speculation as to whether or not *Daubert* will prove to be a confounding factor in cases that are not considered purely “scientific” by established principles.

Petitioners, who are often not corporate entities but private citizens, face distinct challenges in funding their cases, making pre-trial *Daubert* hearings an onerous and very real possibility. To reiterate, we are now facing the sober fact that judges not only need to have knowledge of scientific methodology and all that it entails, but they must also possess a great degree of aptitude for non-scientific, specialized, and technical knowledge, which may be relative to any particular faction of multitudes of fields. The meaning of “experience” is expansive, and it is possible for experts to use this to their advantage.<sup>27</sup> By choosing venues that interpret *Daubert* more conservatively, they can circumvent *Daubert* hearings and, consequently, scrutiny of their experiential testimony. Thus far, the most flexible feature of *Daubert* seems to be postured in its use or exclusion in court cases (perhaps an unintended corollary), rather than its actual procedural application.

As environmental laws and issues gain momentum, and due to the highly scientific nature of the cases that pertain to the environment, it is certain that *Daubert* hearings will increase. It is obvious that *Daubert* is an important precedent in terms of environmental protection, for it has assigned the gatekeeper role to judges, and at the same time has cast them as courtroom scientists. We must question the plurality of experience, education, and political motives of our judiciary, keeping in mind that the vast majority of our judges have their credentials in the sphere of social and political sciences.<sup>28</sup> In light of new scientific procedures and discoveries, is it correct to argue that our judges, who will make decisions that have direct consequences for our environment’s welfare, are experienced enough to take on the decision-making challenges presented by *Daubert*? Was it correct to appoint judges as the gatekeepers of scientific evidence? Are *Daubert* standards too rigid, and will they thereby force judges to throw out any evidence that is considered “new science” specifically because

it is not considered well-enough established according to the rules?

It is apparent that *Daubert* has the potential to undermine the testimony of experts in non-scientific areas, as well. Judges with, perhaps, very little technical knowledge will be determining if the technical expert of 30 years has the capacity to testify in a case relating to his or her field. Under the standards, there is a good chance that the flexibility of *Daubert* will prove beneficial, but this is at least partly dependent upon the type of judicial reasoning that is employed by the presiding judge; the legal realist will have a very different approach from the mechanically jurisprudent judge, who will typically engage in theoretical pigeonholing of the aspects involved when making his or her decision.

A Deweyan approach to environmental issues and environmental law is a promising, experimental means of improving our planet's welfare both now and for future generations. We know that plurality in nature is valuable, and as such it is valuable for a healthy judiciary, and, ultimately, a healthy democracy. Ability to recognize habits that may have negative consequences for the environment is of fundamental urgency, for although it has the appearance of stability in our daily activities, a more holistic view shows that extreme precariousness is a very real trait. We will never be able to completely control our environment (nor should we want to), but we can do our best to mitigate damage to the earth for the betterment of all.

Environmental law is legislated to benefit the environment which is by no means static. Our approach to constructing environmental law and protective measures should take into account the organic nature of the environment, and allow for the flexibility that will be needed to deal with ever-changing conditions. Thus, although there is perhaps nothing that will solve all of our problems immediately, I propose that a Deweyan approach (beginning with an intelligent moral inquiry into human nature) would be a brilliant starting point for locating negative possibilities so we can avoid them, and positive potentials, so that we can employ them for improving our habitat, our judiciary, and our environmental laws.

## NOTES

1. John Dewey, "Existence as Precarious and Stable." Reprinted in *John Dewey: Experience and Nature, The Later Works, Vol. 1: 1925*. ed. Jo Ann Boydston. (Carbondale: Southern Illinois UP, 1988) 42.

2. Larry Hickman, ed. *Reading Dewey*. (Bloomington: Indiana UP, 1998). Dewey claims, "An experience is always what it is because of a transaction taking place between an individual and what, at the time, constitutes his environment. . . . [T]he environment. . . is whatever conditions interact with personal needs, desires, purposes, and capacities to create the experience which is had" (from Dewey's *Experience and Education*). Thus, transaction is exchange between an agent and the environment. Hickman quotes James Garrison's clarification: "Transaction between us and our environment *is* experience, and experience determines a situation." 66.

3. Hugh McDonald, *John Dewey and Environmental Philosophy* (New York: U of New York P, 2004) 68.

4. Dewey, in *Experience and Nature*, writes, "Everything that man achieves and possesses is got by actions that may involve him in other and obnoxious consequences in addition to those wanted and enjoyed." 44.

5. Dewey, *Experience and Nature* 44.

6. McDonald 129.

7. John Dewey, *Reconstruction in Philosophy* (Boston: Beacon, 1948) 99. Dewey writes, “When physics, chemistry, biology, medicine, contribute to the detection of concrete human woes and to the development of plans for remedying them and relieving the human estate, they become moral; they become part of the apparatus of moral inquiry or science... Natural science loses its divorce from humanity; it becomes itself humanistic in quality.”

8. Gregory Pappas, *John Dewey’s Ethics: Deomcracy as Experience* (Bloomington, IN: Indiana UP, 2008) 40-41. According to Pappas, “The failure to recognize the non-cognitive situational context of moral discourse has impeded understanding of Dewey’s views about the ultimate source of guidance in moral life. Even Deweyans often leave this out of their presentation of his view. Dewey, however, is clear: leaving out the non-cognitive situational context is to leave out ‘that which is the controlling factor in my entire view, namely the function of a problematic situation in regulating as well as evoking inquiry.’” Quote by John Dewey was taken from Dewey’s *Later Works* (Carbondale: Southern Illinois UP, 1988).

9. McDonald 82.

10. McDonald 82.

11. McDonald 89. Valuation is a procedure; a process that has the ability to guide and teach us. It is a tool by which we can correct our values if we find them no longer measuring up, and through its use we learn and develop discrimination. For Dewey, the individuals are the primary loci of values, and according to McDonald, “the web of relations required for activity also has its place and value... however, the individual is in a web of relations that connect it in vital ways to larger wholes and to specific kinds... there is recognition that the value realm must extend beyond the individual for the individual bearer to survive.” Thus, although a primary bearer of values, an individual is not the sole bearer of values. McDonald is elucidating the notion that value does not belong to humans alone; he does not deny that nature and other organisms have value for certain, in an instrumental sense. But is there more than instrumental value, value as tools? McDonald purports that there is more, for non-humans and humans alike share growth and development.

12. Thomas Alexander, “Pragmatic Imagination,” *Transactions of the Charles S. Pierce Society* 26. 3 (1990): 336.

13. Alexander 337. Alexander further states, “Our capacity to view the present from a number of possible points of view offers the basis from which more fulfilling values may emerge and be implemented in reconstructive activity. By dramatically engaging these options in imagination, we can anticipate the meaning of the situation” 338.

14. Alexander 337.

15. McDonald 109. McDonald says further, “The need for morals originates in the conflict of different ends, rights, and duties, and the office of morals is to reflect on and help resolve such conflicts over better and worse alternatives” 110.

16. *Daubert v. Merrell Dow Pharmaceuticals, Inc.* 509 US 579, 125 L Ed 2d 469, 113 S. Ct. 2786 (1993).

17. See Fed. R. Evid. 702.

18. Victor E. Schwartz & Cary Silverman, “The Draining of Daubert and the Recidivism of Junk Science in Federal and State Courts,” *Hofstra Law Review* 35.217 (2006): 218.

19. See David Michaels & Celeste Monforton, “Manufacturing Uncertainty: Contested Science and the Protection of the Public’s Health and Environment,” *American Journal of Public Health* 95. S1 (2005): S39-S49. Authors refer to a definition by Peter Huber, credited with coining the term “junk science,” stating that “[It] is a hodgepodge of biased data, spurious inference, and logical legerdemain. . .” S43.

20. *Frye v. United States*, 293 F. 1013 (CADC 1923).

21. Gatowski, et al., “Asking the Gatekeepers: A National Survey of Judges on Judging

Expert Evidence in a Post-Daubert World,” *Law and Human Behavior* 25.5 (2001): 443-458. Gatowski, et al., reported from empirical findings based on survey results that the majority of judges believed their roles as gatekeepers were “appropriate” and they reported that they were “actively engaged in their gatekeeping function” 443-444.

22. Shirley A. Dobbin, and Sophia I. Gatowski, *A Judge’s Deskbook on the Basic Philosophies and Methods of Science*. Chapter 2, “The Judiciary Role in Evidentiary Decision-Making.” <http://www.judicialstudies.unr.edu/judgesdeskbookfulldoc.pdf>.

23. *Kumho Tire Co. v. Carmichael* 526 US 137, 143 L Ed 2d 238, 119 S. Ct. 137 (1999).

24. Gary Edmond, “Legal Engineering: Contested Representations of Law, Science (And Non-Science) and Society,” *Social Studies of Science* 32.3, 9 (2002): 371-412.

25. *Kumho Tire Co. v. Carmichael* 526 US 137, 143 L Ed 2d 238, 119 S. Ct. 137 (1999).

26. See Gary Edmond, “Legal Engineering: Contested Representations of Law, Science (And Non-Science) and Society,” *Social Studies of Science*, 32.3 (2002): 376, 384.

27. See Edmond 377-8.

28. This claim is based on data that I collected over the course of a year. The federal judges of the 13 U.S. circuit courts (N = 232) were researched and contacted to gather information on their formal educations and experience pertaining to the natural sciences. Out of over half of the respondents (N = 180), only a single judge had formal education in the natural sciences: Judge C. Arlen Beam, 8<sup>th</sup> circuit, B.S. in Agronomy. Unpublished paper. Data was presented at the national McNair Conference at Delavan, WI in 2006.