# Truth or Consequences? Maritain and Dewey on the Philosophy of Education

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We have all observed theories that, while they may seem compelling in principle, fail when one applies them to real life. Something like this happened during my student days at Teachers College, Columbia University, where, one might add, no one believes in God, but everyone lights votive candles to John Dewey.

A classmate in the philosophy and education program, a mother of two, was a disciple of the American pragmatist philosopher, and subscribed to his theory of "progressive" education, which rejects the idea of authority imposed, as it were, "from above," preferring instead the "cultivation of individuality." In practical terms, this means allowing the interests of the students, not the teacher, to drive the activities of the classroom. Recalling the activities that grabbed my attention at age seven—more along the lines of watching "Batman" than exploring the process of photosynthesis—I raised some objection, but to no avail. My classmate had embraced the progressive model and dismissed my concerns as those of one locked into the "traditional," that is, a "teachercentered" or authoritarian approach to learning.

Despite our ideological differences, my colleague and I were good friends, and after class we walked together to the telephone booths to call

1. John Dewey, Experience and Education (New York: Macmillan, 1963 [1938]), p. 19.

our respective homes. Before long, I could not help overhearing an increasingly heated conversation, in which my friend tried to convince her nine-year-old son to stop playing Nintendo and clean his room before she got home. At one point, most of the people in the room heard the infamous retort that ends discussion between parent and child: "because I'm the *Mom*, that's why!" So much for the child's interests dictating the course of action! I recalled the wag who once remarked: "The only problem with pragmatism is that *it doesn't work*."

Jacques Maritain was the kind of thinker who could recognize the strengths of contemporary educational methods, while at the same time anticipating their problems. I could find no evidence that he ever met John Dewey when he was a visiting professor at Columbia University in the early 1940s, after the still productive Dewey had retired.<sup>2</sup> Yet it would be remarkable had they not met, for not only does Maritain call the American philosopher a "great thinker," but he understood the implications of secular and progressive theories like those Dewey advocated.

This paper will explore the way in which the epistemological starting points of these philosophers influence their educational priorities. For all man's power to think and act deliberately, he remains, according to Dewey, a natural being whose concerns go no further than adapting to, and surviving in, a "purely mechanical physical world." It follows, then, that human existence is for Dewey a "problem" that calls out for a solution; education is simply the means of furnishing human beings with what they need in order to eradicate the ills afflicting society.

Although Maritain acknowledges and praises the advantages of pragmatic theories of education, he insists that ultimately, "thinking begins, not only with difficulties but with *insights*, [and] without trust in truth, there is no human effectiveness." This conviction makes room for the entire range of human endeavor: survival of course, but also man's spiritual and axiological concerns. The question facing educators, therefore, involves what comes first: the practical use of knowledge in order to solve problems, or a speculative passion for truth, independent of its application?

<sup>2.</sup> Alexander Leitch, *A Princeton Companion* (Princeton: Princeton University Press, 1978), p. 313.

<sup>3.</sup> Jacques Maritain, Education at the Crossroads (New Haven: Yale University Press, 1943), p.115.

<sup>4.</sup> John Dewey, Democracy and Education (New York: Free Press, 1966 [1916]), p. 285.

<sup>5.</sup> Maritain, Education at the Crossroads, p. 13. See also Deal W. Hudson and Matthew J. Mancini, Understanding Maritain: Philosopher and Friend (Macon, Georgia: Mercer University Press, 1987), p. 277.

In Education at the Crossroads, Maritain expresses his admiration for the American emphasis on scientific method, the instrumental value of knowledge, and the need for democracy. Nevertheless, he finds problematic those methods of inquiry that identify truth solely with the empirically verifiable, the idea that the pragmatic application of knowledge is paramount, and the notion that democracy can flourish apart from a spiritual ideal. He therefore challenges his American students "to be as courageous in the field of intellect and reason as in the battles of land and sea and air." These particular concerns make for a fruitful conversation with the thought of John Dewey, whose principles had enormous influence on American education in the twentieth century. This paper will examine the respective views of Maritain and Dewey by noting their points of agreement, their differences concerning reason, faith, and morality, and some concrete implications for education.

#### **Points of Agreement**

It would be inaccurate to claim that Maritain's humanistic views constitute a wholesale rejection of Dewey's pragmatic approach. Rather, while Maritain praises the concrete innovations this method seems to have yielded, he is concerned that its underlying principles might eventually overstep their legitimate sphere of competence. This runs the risk, he implies, of the educational process becoming intellectually narrow, spiritually sterile, and morally bankrupt.

For one thing, both Dewey and Maritain agree that education must have "aims." This might seem obvious, but it is not. Conversations with new teachers often reveal that they are quite voluble when discussing curriculum design, or classroom management, or methods of assessment, and yet if asked precisely why they do what they do, they become not so much laconic as uncommunicative. This would be distressing to both Dewey and Maritain. The true educator, they maintain, must direct classroom activity toward a terminus. Thus Dewey distinguishes between a mere "result," for example, the aftermath of a strong wind blowing sand in every direction, and an "end," when worker bees methodically build and maintain the hive to ensure the survival of the species. The former is merely the random effect of energy expended on matter; the latter, although not the result of conscious deliberation, is yet an instance of activities performed in continuity that finally reaches "completion." Maritain, for his part, notes that

<sup>6.</sup> Maritain, Education at the Crossroads, p. 117.

<sup>7.</sup> John Dewey, Democracy and Education, p. 101.

while new methods of education often surpass what he calls the "old pedagogy," they concentrate on skills, but have no organizing principle. To dramatize his point, he compares the teacher with great technique but no clear objective to the brilliant physician who contents him or herself with a brilliant diagnosis, but lets the patient die for lack of a cure. In improving the means, one must not neglect the end.<sup>8</sup>

One also finds consensus between Dewey and Maritain regarding scientific method, both as a source of knowledge and as a tool for social progress. Dewey stresses, indeed to the point of excess, the notion of scientific method as the arbiter of truth, that science is ultimately "the friend and ally of man," for the simple reason that it makes possible "the control of nature." According to Maritain, the truths of science combine with those of other disciplines to form a "symphony" with both complicated structure and internal unity. In his view, the sciences should form an integral part of both the secondary school "quadrivium" and collegiate study. 10

A third point of convergence between Dewey and Maritain concerns their mutual regard for action in education. Not surprisingly, Dewey the pragmatist thinks action—for instance, building a bridge or curing a disease—is the ultimate mark of "truth" in an academic subject or even in philosophy itself, a term he uses to indicate a "generalized theory of education ... to be tested in action." So integral is activity to human cognition that he claims they are virtually inseparable. Although Maritain adopts a less exalted view of action, he also recognizes the advantages that accrue to an education that involves activity. Action, as young people today might put it, is what "keeps it [the official school curriculum] real."

## Metaphysical and Epistemological Differences

A deeper examination of these philosophers, however, reveals some striking dissimilarities between them. Of course, Dewey occasionally uses the terms "truth" and "epistemology," although he thinks that they tend to

- 8. Maritain, Education at the Crossroads, p. 3.
- 9. John Dewey, *Individualism Old and New* (New York: Minton, Balch and Company, 1930), p. 151.
  - 10. Maritain, Education at the Crossroads, pp. 5, 47, 57, 67-68.
  - 11. Dewey, Democracy and Education, p. 331.
- 12. Ibid., pp. 137-138. "(M)ind and intelligent or purposeful engagement in a course of action into which things enter are identical."
- 13. Maritain, *Education at the Crossroads*, p. 43. The teacher must be ready "with the lessons of logic and reasoning that invite to action the unexercised reason of youth."

create "a gulf between the knowing mind and the world," so much so that the two become "wholly separate from one another." Thus, instead of "epistemology," he prefers the more dynamic sounding "theory of inquiry," and instead of "truth," he favors the term "warranted assertibility." Dewey's criteria for making a "warrantably assertable" statement include five things: a difficult situation in which people find themselves, the articulation of the "problem," the proposal of a "solution," the activity of "reasoning" (that is, the analysis of options about what must be done), and finally, the procurement of resources for the project.<sup>15</sup> If limited to the sphere of science, this could be a defensible position, although it is debatable whether one can only acquire knowledge within a "problem" situation. The much more disturbing notion is the idea that natural or empirical science is the ultimate judge of truth statements. In A Common Faith, Dewey states: "There is but one sure road of access to truth—the road of patient, cooperative inquiry operating by means of observation, experiment, record and controlled reflection."16 This is a truly breathtaking claim, and its context is significant. Dewey is describing what is for him a "revolution" regarding "the seat of intellectual authority." He maintains that, up to this point, human beings have looked to religion for the answers to the ultimate questions of human existence. This is no longer the case, he contends; indeed, the well being of society depends upon the elimination of such a dangerous idea. 17 Instead, Dewey suggests that inasmuch as an idea can be empirically proven, analyzed, defined, and used for some practical purpose, it is "true." It is therefore not surprising that Dewey identifies science and religion as "rival" systems that make opposing claims. To hold a different conception of truth is, according to him, to operate under the mistaken premises that thought is separable from activity, and that moral principles transcend action.<sup>18</sup> Bizarre ideas such as these, according to Dewey, have exercised a stranglehold over western civilization for the past two millennia.

<sup>14.</sup> Dewey, Democracy and Education, p. 293.

<sup>15.</sup> John Dewey, Logic: The Theory of Inquiry (New York: Irvington Publishers, 1982 [1938]), pp. 105-19.

<sup>16.</sup> John Dewey, A Common Faith (New Haven: Yale University Press, 1934), p. 32.

<sup>17.</sup> Ibid., p. 31.

<sup>18.</sup> John Dewey, *The Quest for Certainty* (New York: Minton, Balch and Company, 1929), pp. 43-44. Dewey rejects the ideas "that knowing is independent of a purpose to control the quality of experienced objects ... [and] that values are authentic and valid only on condition that they are properties of Being independent of human action; [and] that their right to regulate action is dependent upon their being independent of action."

One might therefore ask, however, whether Dewey accurately represents the "traditional" religious position or, at any rate, the position of Christian philosophy in its Thomistic form. As Maritain points out in *The Degrees of Knowledge*:

The scholastics said that the relation between the soul that knows and the thing known is a real relation (because it puts something new in the soul) but [this] ... relation of reason ... does not in any way affect or change the thing known. The thing and the mind are not two things in the act of knowing ... [they] are not only joined, they are strictly *one*.<sup>19</sup>

Clearly, Thomism recognizes a dynamic relationship, indeed a unity, between the mind and an object of knowledge, yet it does so without implying that in the absence of a mind to know it, a thing ceases to be. In this sense, Dewey is guilty of the error Maritain detects in modern philosophy, namely, the failure to distinguish between the thing in itself, that exists independently of my mind possessing "extramental" existence, and the thing as object of knowledge, that is, the thing for me. 20 Ultimately, the danger of scientific positivism for education is that it bases its claims upon what Maritain calls a "spurious metaphysics ... deprived of ... philosophical insight ... without which education ... becomes the training of an animal for the utility of the state."<sup>21</sup> Perhaps it is easier to understand a purely scientific view of the world that only recognizes the empirically verifiable as "real." Perhaps it is less troublesome to avoid questions that concern the origin, nature, and end of human existence. 22 And yet, does not a position such as this drain life of its deepest meaning, its beauty, its sense of purpose? Maritain concedes that there is a struggle between a purely scientific explanation of the world, which explains "how matter behaves," but not "what matter is," and the philosophical/religious explanation that seeks the "wisdom for which the human mind thirsts."23 Properly understood, science can perform an invaluable service to mankind, but educators must be aware of its scope and its limitations. Moreover, to be true to its own principles, science must recognize at least the possibility of phenomena that cannot be explained with the tools it currently possesses.

<sup>19.</sup> Jacques Maritain, *The Degrees of Knowledge*, trans. Gerald B. Phelan (New York: Charles Scribners Sons, 1959), p. 87.

<sup>20.</sup> Ibid., p. 91.

<sup>21.</sup> Maritain, Education at the Crossroads, p. 6.

<sup>22.</sup> Ibid., p. 4.

<sup>23.</sup> Jacques Maritain, *Man's Approach to God* (Latrobe, Pennsylvania: The Archabbey Press, 1960), p. 3.

### Differences Regarding Faith and Its Object

Given the metaphysical and epistemological abyss separating Dewey and Maritain, their views on the subject of religious and moral education are predictable. Dewey esteems what he calls the "religious" attitude. Its roots, he maintains, are in the imagination, and it compels an individual to undertake, not surprisingly, an activity for the sake of an "ideal end," even in the face of opposition or intimidation.<sup>24</sup> As Dewey understands it, this disposition is consistent with, because it is subject to, a purely scientific view of the world. He compares the religious attitude with "religion," that is, a collection of beliefs and ideas regarding "unseen powers" that elicits myriad expressions of devotion and obedience, and that for the lack of any intellectual rigor and moral cohesion, is responsible for many of history's darkest hours.25 "Faith," for Dewey, is the stance one adopts toward religion, by which one merely accepts various unproven beliefs as true; it is "a substitute for knowledge,"26 and therein lies its danger. One assents to a number of ideas, says Dewey, not because they are intellectually plausible, but because they are imposed by an external authority that sometimes compels its adherents to do deplorable things. The responsibility of genuinely religious people today is to disengage religious or "mystic" experience from its moorings in the realm of the supernatural, which historical religions established long ago.<sup>27</sup>

Yet if there is an ideology that dominates contemporary human thought, Maritain suggests that it is not the religious view, but the purely scientific one. He does not mean that revealed religion and science are antithetical per se. Indeed, for Maritain they are compatible and complementary, inasmuch as they represent different kinds of truth to which the mind gains access through different methods. If anything, Maritain implies that extreme scientism is inadequate, not because its ambitions are too great, but precisely because it settles for so little. To say that "truth" is no more or no less than what is "entirely verifiable in sense-experience" is not only to deny that an ordinary encounter points beyond itself to the transcendent, but indeed it is to overlook what precedes natural knowledge. Even before acquiring information

<sup>24.</sup> Dewey, A Common Faith, pp. 23, 27.

<sup>25.</sup> Ibid., pp. 4-6.

<sup>26.</sup> Ibid., p. 20. Italics mine.

<sup>27.</sup> Ibid., pp. 2, 6, 30, 65, 73.

<sup>28.</sup> Maritain, Man's Approach to God, p. 2.

<sup>29.</sup> Maritain, Education at the Crossroads, p. 4.

about the world, one undergoes what Maritain calls a series of "intellective leaps." The first of these is the "prime intuition of Being," that is, awe at the very fact of existence, that every creature is "in its own way ... completely independent from me." This gives way to the potentially terrifying awareness that although I actually exist, I need not. In turn, contingent being itself implies "some absolute, irrefragable existence, completely free from nothingness and death." Thus, without denying scientific truth or the method for attaining it, indeed without invoking the name of God, Maritain argues that there is more to reality than what we can observe.

Moreover, Maritain recognizes that faith yields an imperfect knowledge, but only because of the subject's limitations. Unlike Dewey, Maritain adds that the object of faith surpasses finite beings, whose existence and qualities can be perceived and measured.<sup>31</sup> Indeed, faith exceeds knowledge of the material world, which merely points to the source of all being and perfection.<sup>32</sup> For Maritain, genuinely religious people recognize that the realities they accept through faith are not impossible or absurd; on the contrary, they lie above and beyond the grasp of reason. Accordingly, human beings talk about the divine, not by means of language in its literal sense, but by way of analogy.<sup>33</sup>

## **Differences Regarding Moral Education**

Concerning morality, once again Dewey criticizes the traditional view that conceives of truth as a fixed body of ideas to which one gives unquestioning intellectual assent. According to him, an individual finds the criteria for ethical judgment, not in generalized concepts about human nature, but only "in consequences." Morality on the collective level, in turn, is largely a matter of balancing interests between parties. While Dewey at times criticizes what he calls the "practical failure of utilitarianism," his own views are not altogether unlike it. 35 Whereas utilitarians,

- 30. Maritain, Man's Approach to God, pp. 8, 9, 11.
- 31. Ibid., p.24.
- 32. Ibid., pp. 26-27. Faith "dwells in the divine fountainhead itself. In contrast, merely rational and natural knowledge of God dwells in the created world, and from there gazes—without seeing it in itself—at the inaccessible source toward which all perfections of created things converge."
  - 33. Ibid., pp. 24, 31.
  - 34. John Dewey, Ethics, rev. ed. (New York: Henry Holt and Company, 1932), p. 363.
- 35. John Dewey, *Characters and Events* (New York: Henry Holt and Company, 1932), p. 813.

such as Bentham and Mill, are concerned with the greatest good for the greatest number, Dewey is concerned with how a group settles its differences. Democracy, which he calls "organized intelligence," is the most effective method of articulating and balancing individual interests to serve those of "the great majority."<sup>36</sup>

The pertinence of all this to education lies in Dewey's conviction that the school is, for all practical purposes, not so much preparation for democracy as democracy in miniature.<sup>37</sup> At the same time, education is the institution through which "the mature, the adult, gradually raise the helpless to the point where they can look out for themselves."<sup>38</sup> It does so by "simplifying, purifying, and balancing" the social environment. This means transmitting society's valuable habits and mental dispositions to the young, and eliminating undesirable ones, while enabling individuals gradually to become members of a larger group.<sup>39</sup> Yet precisely how this happens Dewey does not explain, and it does not help when he states that groups exercise "a formative influence"—that is, they impose themselves—upon their younger members. Although Dewey employs a euphemism about "nurturing the capacities of the immature," the distinction between genuine moral development and manipulation of the young ultimately remains unclear.<sup>40</sup>

Maritain's approach to moral education, by contrast, integrates many of the positive elements of Dewey's thought, without either minimizing the importance of faith or suggesting a veiled form of social control. If Dewey accuses institutional religion of projecting natural values "into a supernatural realm for safe-keeping and sanction," Maritain offers a different explanation for the link between ethics and religion. For him, morality is one of the three "pre-philosophic approaches" to God, the others being awe at existence, and aesthetic experience. It is not that adherents of religion blindly follow a set of static, preconceived moral regulations. Rather, the personal experience of moral goodness arouses within the human being

<sup>36.</sup> John Dewey, Liberalism and Social Action (New York: Minton, Balch and Company, 1935), p. 77. Democracy settles "conflicting claims ... to the interests of all—or at least of the great majority. The method of democracy—insofar as it is that of organized intelligence—is to bring these conflicts out into the open ... where they can be discussed in the light of more inclusive interests than are represented by either of them separately."

<sup>37.</sup> Dewey, Democracy and Education, p. 360.

<sup>38.</sup> John Dewey, *Reconstruction in Philosophy* (New York: Henry Holt and Company, 1920), p.184.

<sup>39.</sup> Dewey, Democracy and Education, pp. 19-21.

<sup>40.</sup> Ibid., pp. 21, 22.

<sup>41.</sup> Dewey, A Common Faith, p. 73.

a yearning for Goodness Itself.<sup>42</sup> Like the desire for meaning and beauty, moral intuition is yet another example of the human capacity to detect the transcendent within the ordinary. Indeed, as George Steiner insists, the very attempt to convey meaning of any kind "is, in the final analysis, underwritten by the assumption of God's presence."<sup>43</sup>

Moreover, Maritain explicitly rejects as one of the great misconceptions of modern education, the goal of "adapting" the individual to the conditions of social life. To do so is to put the cart before the horse. Why? Because if the social environment is toxic, that is, immoral, then "adapting" the young to it is simply another term for *corrupting* them. One of the great weaknesses of Dewey's system is that, for all its talk of "aims," it lacks a clear, unified goal that holds true for all human beings. According to Maritain, by contrast, education develops people's God-given intellectual and moral capacities in order that they might understand and evaluate the cultural legacy of which they are heirs. He does not envision morality as a matter of group habits imposed on individuals, but rather as the exercise of a uniquely human process through which people achieve their end. Maritain's argument, unlike Dewey's, is genuinely teleological.

### Implications/Conclusion

As we have seen, the aforementioned differences between the educational theories of Maritain and Dewey are significant in three areas: intellectual, religious, and moral. For Maritain, pragmatism is a poor basis for education because its "aims," however well intentioned, are set very low. Intellectually, is education simply the process of training people to solve problems, and of helping them to learn how to adapt to their environment, as Dewey claims? Is it true that education is merely "one with growing, having no end beyond itself?" Or is the aim of education, instead, to

- 42. Maritain, Man's Approach to God, pp. 19-20. "[W]hen a man experiences ... the impact of the moral good, and is thus awakened to moral existence, and directs his life toward the good for the sake of the good, then he directs his life, without knowing it, toward the absolute Good."
- 43. George Steiner, Real Presences (Chicago: The University of Chicago Press, 1989), p. 3.
  - 44. Maritain, Education at the Crossroads, p. 15.
- 45. Ibid., p. 10; See also pp. 9, 42. "The aim of education is to guide man in the evolving dynamism through which he shapes himself as a human person—armed with knowledge, strength of judgment, and moral virtues—while at the same time conveying to him the spiritual heritage of the nation and the civilization in which he is involved."
  - 46. Dewey, Democracy and Education, p. 53.

"provide one with the foundations of real wisdom," and thus to liberate the human person, as Maritain claims?<sup>47</sup>

Concerning religion, there is growing evidence that Dewey's prediction of the eclipse of religion's role in the life of a nation, and the rise of a purely secular society, has been discredited. *The New York Times* even admits that the forecast of Dewey, a so-called "intellectual giant," may have been premature. It notes, for instance, the undeniable influence of religious principles in debates about public policy, from bioethical issues (stem cell research, abortion, and euthanasia) to matters of family life (gay marriage/adoption), and from educational controversies (prayer in public schools and school vouchers) to just war with Iraq. Indeed, as Maritain points out, the lessons conveyed through participation in religious activities, which are usually extra-curricular, often "exert an action which is more important in the achievement of education than education itself."

And finally, regarding moral education, Dewey's pragmatic convictions focus on consequences and the balance of interests, not on universal principles. He explicitly rejects the notion of natural law, and for that matter, any system of morality that claims "universal validity," precisely because it implies a religious or comprehensive world view. His idea is echoed frequently by students who understand morality as only a "socially constructed," historically conditioned, phenomenon. When asked, for example, whether slavery is morally objectionable, they respond, "To us, here and now, yes, but not to people one hundred and fifty years ago." The unspoken presumption, of course, is that one may not condemn any practice in principle, however heinous, because to do so smacks of "intolerance," and one must not seem intolerant of anything ... except, of course, intolerance itself! Yet in this case, the idea of "tolerance" becomes itself a generalized attitude claiming universal validity.

Furthermore, understanding personal morality strictly in terms of consequences can be disastrous, not only because the absence of principle prevents one from seeing the larger context, but because it is not always possible to predict long-term consequences accurately. A perfect example of this is the "one-child-per-couple policy" that China has enforced by means of forced sterilization and abortion. The practice was originally

<sup>47.</sup> Maritain, Education at the Crossroads, pp. 48, 71, 100.

<sup>48.</sup> Felicia Lee, "The Secular Society Gets Religion," *The New York Times*, 24 August 2002, p. B 7.

<sup>49.</sup> Maritain, Education at the Crossroads, p. 25.

<sup>50.</sup> Dewey, Characters and Events, pp. 476-78.

intended to reduce the population and raise the standard of living, but the actual result is that today men outnumber women in China by about forty million. This has created what one writer calls a "demographic nightmare that threatens China's stability and endangers prospects for greater political freedom." The disparity between the number of men and women is linked to a rise in "forced marriages, girls stolen for wives, bigamy, visiting prostitutes, rape, adultery ... homosexuality ... crime," and even the specter of war.<sup>51</sup>

Not surprisingly, it is in the context of a discussion of collective morality that Maritain mentions Dewey by name. While Maritain declares his admiration for Dewey as a person, he faults him for justifying democracy on a merely pragmatic basis, and for not recognizing the "spiritual" power that ought to motivate it. Of course, for Maritain, democracy is preferable to other systems. Yet this is not simply because democracy serves the interests of the majority; instead, it is because democracy is born of "the will to justice and brotherly love," that it originates from the moral human urgency that yearns for Goodness Itself.<sup>52</sup>

Ultimately, Maritain's thought on the relationship between truth and education is distilled in his advice to young people at the end of *Education* at the Crossroads. According to him, education has many important features, but its first concern is, and must be, truth, that is, the conformity of the mind to reality. Everything else—the acquisition of knowledge, the control of the environment, or practical success—is secondary. Only when human beings are equipped with a passion for truth, can they "show the world how human action may be reconciled with and permeated by an ideal which is more real than reality, and why it is possible and right to die for liberty."<sup>53</sup>

<sup>51.</sup> Paul Wiseman, "China Thrown Off Balance as Boys Outnumber Girls," USA Today, 19 June 2002, p. A 1.

<sup>52.</sup> Maritain, Education at the Crossroads, p. 115.

<sup>53.</sup> Ibid., p. 117. "What your intellect and reason have to win is something which is not to be measured or manipulated by scientific tools but grasped by the strength of rational insight arising from what your eyes see and your hands touch; a universe of realties which make your thought true by virtue of their very being, and not merely as a result of successful action. This is the universe of intelligible being and of the sacred character of truth as such."