

NOTE OF THANKS

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The Editor

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PREFACE

This volume of *Educational Change* is organized around the educational thought of John Dewey following a cue from our association's theme for the 1999 meeting at SUNY Oswego. The officers of the N.Y.S.F.E.A. reasoned that this would be an appropriate way to mark the 140th anniversary of the birth (1859) of America's leading educational thinker. It is also a testament to John Dewey's significance and enduring influence.

The papers collected in this volume reflect the views and responses by scholars to some contemporary problems and recent events in our social and educational landscape. All these essays take seriously Dewey's conviction that the education of the individual is primarily a social affair and is best understood in the context of the individual's experiences. The academic disciplines from this perspective provide us with a series of experiences which noteworthy human beings have found useful and imbued with special significance. It is no less the case with our many social institutions; these or part of these may become dull and may even cease to fulfill their intended purposes. However, at one time these experiences and institutions must have enjoyed a special meaning which John Dewey privileged with the designation of "an experience." This designation is a qualitative consideration which for Dewey characterizes all human experiences at their best. The fact that most of our actions lack this qualitative integrity that Dewey associated with the artistic as well as with the "religious" (contrasted to "religions") is a sign that we live in a world organized along the unfortunate traditional dualisms of means and ends, matter and form, substance and process, etc. For Dewey an appropriate accounting of the facts would reveal these as mere intellectual distinctions which give us only aspects or fragments of experience, however useful these are, they are still distortions. In short, such divisions taken literally would commit what A. N. Whitehead has called the "fallacy of misplaced concreteness," i.e. substituting an abstraction for the actual concrete experience. Dewey no less than Whitehead insists on the recovery of "lived experience" as the central foundation of all philosophical thought and consequently, all human affairs, and espe-

cially educational affairs.

The above brief yet simplistic overview will help to introduce the contributions in the present volume of *Educational Change*. The first, "Spiritual Education as Poetic Creation in Dewey's Religious Humanism," is the 1999 keynote address to the N.Y.S.F.E.A. at SUNY Oswego delivered by Dr. James Garrison from Virginia Polytechnic Institute and State University. The most salient feature of the article is the focus on Dewey's fundamental philosophical center which tries to salvage individual experience from the slings and arrows of the present industrial and economic order. Professor Garrison suggests that all human experiences at their best exhibit an integrative quality which he calls spiritual. Further, this qualitative character is similar to the phenomena which all successful artistic creations exhibit. Consequently, all the arts when informed by the ancient Greek notion of *Poiesis*, understood as "creation, making or calling into existence" are spiritual. This creative and integrative phenomena cannot be explained away through our ordinary relational methods. For Dr. Garrison this suggests a corollary to his main thesis, i.e., spirituality is more important than rationality. Regarding this corollary I am not as confident, as Dr. Garrison seems to be, that it is a correct rendering of Dewey's view. I suspect that Dewey would have viewed the distinction between rationality and spirituality as primarily formal. In the chapter, "Having an Experience," of *Art as Experience* Dewey states that, "It is not possible to divide in a vital experience the practical, emotional, and intellectual from one another and to set the properties of one over against the characteristics of the other." [1] Perhaps Dr. Garrison's use of rationality merely refers to reasons and structures that drive the present industrial economic order.

The second essay, "Rescuing Dewey from Anthropocentrism" by Professor Tom Colwell from New York University, is a response to Dewey critics such as C. A. Bowers. Dr. Colwell characterizes Bowers as claiming that Dewey's view of science "cannot escape the Western habit of aligning itself with rampant technological and economic progress." [2] Consequently, Bowers is suggesting that Dewey's attempt to overcome the dualistic implications with respect to differing cultures is mired in the Western historical context from which Dewey articulated his views.

Accordingly, Bowers contends that Dewey discards or excludes non-Western views and practices.

From here, Professor Colwell goes on to outline a possible defense of Dewey against Bowers' charges. Colwell's essay is a fair-minded presentation of both the strengths and weaknesses to which Dewey's language lends itself. For example, Dr. Colwell points out Dewey's ambiguous use of the term "nature" with its dual connotations one which includes humans and one which excludes humans. He suggests that a sharper presentation of Dewey's scientific methodology along with a modest program of language reform would go some way in correcting the charges of anthropomorphism made against Dewey by critics such as Bowers. This in Colwell's view is a two part process. The first part focuses on the concept of "transaction" which Dewey together with Arthur Bentley introduced as a way of overcoming the dualistic charges. But this alone is inadequate in overcoming the anthropomorphic problem and consequently leads Colwell to the second part of his proposal, the use of the term "earth-system" instead of "nature." Through these suggestions he hopes to avoid the dualistic and anthropomorphic difficulties. However, Colwell seems well aware that his suggestions do not put an end to the problem, they are offered as constructive efforts in accordance with Dewey's spirit against dogmatism of any kind, be they of an a priori or a teleological kind. Dewey's voice rings clear throughout his many writings as it does in the following from *The Quest for Certainty*. It is clear that all insight, rules, principles, etc. are viewed as flexible and tentative:

"these [standards, principles, rules], and all tenets and creeds about good and goods, would be recognized to be hypotheses. Instead of being rigidly fixed, they would be treated as intellectual instruments to be tested and confirmed – and altered – through consequences effected by acting upon them. They [standards, principles, rules, tenets, creeds, goods] would lose all pretense of finality – the ulterior source of dogmatism." [3]

The above captures Dewey's insistence on "treating any and all cultures with reasonable impartiality," since all ideas including those that form the foundations of cultures have the status of hypotheses. Whatever difficulties one may encounter in the historical process, in principle, Dewey insists that all cultural foundations have a hypothetical status. In a parallel fashion Colwell tries to address the human and non-human distinction. However, this kind of dualism is a far more difficult problem, but Colwell's flexible approach and appreciation of the linguistic nuances goes some way in developing an attitude of mind through which one may approach the divide with the more inclusive concept of earth systems.

A similar attitude of mind surfaces in the essay, "Conduct and Culture: Dewey and Cassirer," by Professor Thora I. Bayer from Xavier University of Louisiana in New Orleans. In it she provides an analysis of Dewey's concept of "habit" and Cassirer's concept of "symbolic form," which suggests that Cassirer's *Essay on Man* and Dewey's *Human Nature and Conduct* complement each other and may be viewed as a common enterprise. Dr. Bayer argues that out of this common enterprise one may elicit principles of general education. Loosely, Cassirer's symbolic forms seem to correspond to the disciplines that commonly form a basic curriculum at many of our institutions of higher learning, i.e., myth, religion, language, art, history, science, technology, economics, law and morals; whereas, Dewey's habits are the organized and settled behaviors that collectively comprise customs. Dr. Bayer argues that Dewey's *Human Nature and Conduct* may be viewed as forming a social psychology of conduct undergirding Cassirer's concept of culture articulated in his *Essay on Man*.

Professor Bayer's essay is intriguing and suggestive and I hope she will provide us with an additional study of the connection between habits and symbolic forms and address the ontological status of Cassirer's symbolic forms. This should shed light on the critical question: Are symbolic forms patterns that occur in all cultures? Further, a discussion of Dewey's habits along similar lines is equally as significant. Taking account of the fact that habits change over time as well as the fact that

habits cease to fulfill their intended consequences should have a bearing on the total analysis. These considerations are crucial in working out the principles of general education.

These ruminations bring one to the kinds of concerns and issues raised by Dr. Lee Fleischer from Brooklyn College, City University of New York, in his article, "Reflections on Teaching a Core Course: Speaking Post-Structurally of Dewey and Mead." Professor Fleischer's comments revolve around the degree of discrepancy between the paradigms (structural-functional, social conflict, and symbolic interaction) found in the core course's required text [These United States (College of Staten Island, CUNY)] and the actual concrete experience of his students ("recent immigrants who had difficulty speaking English, African-American and Hispanic students, and poor or struggling middle-class white Italian, Jewish, and Irish Americans").[4] By examining the discrepancy between these paradigms and his students' lived experience Dr. Fleischer along with his students found the text's guiding assumptions to be biased towards a structural-functional model. Further, the text discredited the social conflict model and collapsed the symbolic interactive model into the larger structural-functional one. Accordingly, the text, for the most part, constructed the individual's experiences along the lines of the established norms as defined by the dominant groups.

It is Fleischer's view that the text's guiding assumptions fail to do justice to the individual's experienced subjectivity. Thus the experienced conflicts, mixed loyalties within the individual within the groups and within the subgroups to which the individual belongs and in which the individual participates are distorted. He further suggests that the divisions and fragmentations that burden the self may be better appreciated and uncovered when approached from the perspective and language of the post-structural theorists (Lacan, Pecheux, and Foucault). From these considerations, he further suggests that Dewey fails to capture these distortions because he remains "confined within a stable notion of the self as self-consistent, grounded on dominant group norms representing business, technology and science interests." [5] Consequently, for Fleischer, Dewey does not "describe a self that is crossed, "shot through" by conflict, contradiction, and co-option of the dominant group, breaking apart its unified sense of self." [6]

It is puzzling that Fleischer finds Dewey's analysis with respect to the self, classes and hegemony lacking. Many passages in Dewey's work *Human Nature and Conduct* will force one to reconsider Fleischer's contention. The following from the "Introduction" to *Human Nature and Conduct* speak to the issue:

"We are forced therefore to consider the nature and origin of that control of human nature with which morals has been occupied. And the fact which is forced upon us when we raise this question is the existence of classes. Control has been vested in an oligarchy. Indifference to regulation has grown in the gap which separates the ruled from the rulers. Parents, priests, chiefs, social censors have supplied aims, aims which were foreign to those upon whom they were imposed, to the young, laymen, ordinary folk; a few have given and administered rules, and the mass have in a passable fashion and with reluctance obeyed." [7]

"All action is an invasion of the future of the unknown. Conflict and uncertainty are ultimate traits." [8]

In the above there is a clear recognition of the hegemonic character of the social order no less than the existence of classes. Further, Dewey is aware of the multiplicity of loyalties and demands from numerous quarters (Fleischer's groups and subgroups) which the self confronts in the transactions of every day life. Many passages throughout Dewey's writings such as the following from the chapter "Custom and Morality" in *Human Nature and Conduct* confirm it:

"For segregated classes develop their own customs, which is to say their own working morals... But mobility invades society. War, commerce, travel, communication, contact with the thoughts and desires of other classes, new inventions in productive industry, disturb the settled distribution of customs. Congealed habits thaw out, and a flood mixes things once separated." [9]

“Today such a conflict occurs between propertied classes and those who depend upon daily wages; between men and women; between old and young. . . . Never before have there been such occasions for conflict which are the more significant because each side feels that it is supported by moral principles.”[10]

It seems as though Dr. Fleischer is talking at cross purposes. I suspect Dewey would have agreed with Dr. Fleischer’s view of the divided, fragmented and even self-deluded self. However, Dewey’s project is to move beyond such an ineffective and manipulated self in order to find and provide the basis for effective and constructive action. As Dewey says, “Integration is an achievement rather than a datum.”[11]

The disordered, fragmented, conflicted self of everyday life is the “datum” Fleischer has found present in his students in the core course at CUNY College of Staten Island. If Dewey were alive today, most likely he would agree with Fleischer’s account. However, it is doubtful that Dewey “remains confined within a stable notion of the self as self-consistent, grounded on dominant group norms representing business, technology, and science interests”[12] as Fleischer claims. It seems, if I am not misled, Dewey’s entire drive is to overcome a static notion of the self, i.e. a self tied to fixed habits that result in specified routines such as those presently exhibited by business, technology, science and education, etc.

A view closer in spirit to Dewey is found in Professor David Granger’s account of his classroom experiences during his first semester (Fall 1999) at SUNY Geneseo. The self Dr. Granger finds in Dewey is a self that engages the world with stable but provisional habits. Because these stable habits are provisional they may be restructured in response to conflicts, changing conditions as well as changing priorities. It is on the energy of liberated impulses in times of conflicts and change combined with the use of intelligence that Dewey stakes his hopes for the improvement of human conditions. Dr. Granger expects decision makers to be mindful of such processes when they examine the policies, programs and practices of education programs. Using Landon Beyer’s

Creating Democratic Classrooms: The Struggle to Integrate Theory and Practice as a springboard Granger invokes Dewey's "cultivated naiveté" as a way for future teachers to seize events and situations to overcome the unhappy results of "unreflective socialization," the make-up of many a teacher's education program.

As he negotiated his way during his first semester at SUNY Geneseo Granger developed a sketch of his students: he found them reticent in the classroom, apolitical, uncomfortable with risks and experiencing intense anxiety taking tests. This should not come as a total surprise. I suspect there is a degree of discomfort with taking risks as well as with taking tests (another risk). The uncertainty of the outcome on which so much rides is enough to give one pause. Nonetheless, as Granger indicates, one must examine the landscape of education programs from the perspective that future teachers develop principles of growth and acquire habits (arts, skills) viewed as tentative and open to improvement, adjustment and even replacement. This is not easy, for it involves a struggle between an old self (what one is) and a new self (what one hopes to become), and the struggle is not free from risk or anxiety. Dewey reminds us, over and over again, the invasion of the future is riddled with conflict and uncertainty.

Finally, this volume of Educational Change continues the features initiated in previous volumes, the publication of the winning essay of the "N.Y.S.F.E.A. Essay Contest" and the publication of "Notes and Comments." The winner of the second essay contest is Sarah Dodge from Caledonia Mumford School with the "Philosophical Basis for the Use of Empirical Methods in Teaching Mathematics." The competition was funded by the office of Dr. Linda Bemier, Dean of Education at SUNY Binghamton.

In the section on "Notes and Comments" we are pleased to include first, a note by Dr. Douglas Shrader of SUNY Oneonta on "Education and the Environment: Experience, Dependent Origination, and Relational Identity;" second, a comment by Dr. Shawgi Tell of Nazareth College in Rochester, NY, on "Expanding the Conception of Prejudice in

Multicultural Education: A Theoretical Note;” and third a book review by Dr. Jennifer Manlowe of Long Island University on Timothy Glander’s (a past president of our association and presently chair of Department of Education at Rockhurst University in Kansas City, MO) book on the Origins of Mass Communications Research During the American Cold War: Educational Effects and Contemporary Implications.

ENDNOTES

[1] John Dewey, Art as Experience in Jo Ann Boydston (ed.), John Dewey: The Later Works, volume 10 (Carbondale: Southern Illinois University Press, 1987), p. 61.

[2] Tom Colwell, ”Rescuing Dewey from Anthropocentrism,” Educational Change (Spring 2000), p. 15.

[3] John Dewey, The Quest for Certainty in Jo Ann Boydston (ed.), John Dewey: The Later Works, volume 4 (Carbondale: Southern Illinois University Press, 1984), p. 221.

[4] Lee Fleischer, “Reflections on Teaching in a Core Course: Speaking Post Structurally of Dewey and Mead,” Educational Change (Spring 2000), p. 32.

[5] Ibid., p. 39-40.

[6] Ibid., p. 35.

[7] John Dewey, Human Nature and Conduct (New York: The Modern Library, Inc., 1957), p. 2.

[8] Ibid., p. 12.

[9] Ibid., p. 82-83.

[10] Ibid., p. 83.

[11] Ibid., p. 38.

[12] Fleischer, op. cit., p. 39-40.

SPIRITUAL EDUCATION AS POETIC CREATION IN DEWEY'S RELIGIOUS HUMANISM

James Garrison

Many throughout the world feel that the second millennium after the beginning of the Christian era marks an immense crisis in human spirituality; I agree. Spiritual values have succumbed to the commercial values of a global economy almost everywhere. Technical rationality has so defeated spirituality that governments as well as individuals calculate their values in terms of utilities rather than responsibilities. The assumption is that having more implies being more. People have become ciphers rather than selves. Fragmented and frustrated, the multitudes desire spiritual unity.

In the United States reaction to spiritual poverty has ranged from the reappearance of the "Religious Right" to the advocates of "New Age" thinking. In education, religious unrest has led to calls for restoring school prayer, to more support for private schools as a way to support private religious education, to demands for curriculum reform. The din of business-minded reform and the requirements for national tests that will improve "competition" among schools usually, however, smother these voices.

My contribution to the ongoing debate over the role of religion and spirituality in education is small. I want to suggest that if we conceive of spirituality as an active poetic quest for meaning, understood as more intimate and meaningful relationships with existence wherein what we do matters, then the arts are the best way to restore spirituality to our schools. By the "arts," however, I mean something much finer than just the fine arts. What I advocate is a return to the ancient Greek notion of *poiesis* that is, creation, making, or calling into existence. In this sense vocational or multicultural education is potentially as poetic as English or music education and, therefore,

potentially as spiritual.

Currently, the manufacture of human resources to amplify the production function is the aim of public education in the industrialized world. So-called “public schools” often serve the predominantly private purposes of business and industry. Given the same curriculum and the same schools we now have, it would be almost as easy to make spiritual awakening the aim of education. Surely, every individual as a true poet, a spiritual seeker, a creator is a worthier goal than every individual as a utile of economic production. This may all be done without violating the wisdom that separates church and state.

A secondary thesis of this paper, stated boldly, is that spirituality is more important than rationality. We should esteem rationality only insofar as it contributes to spirituality. Spirituality, I suggest, is the struggle for poetic unity. It is part of what Thomas Alexander (1993) calls “the Human Eros,” by which he means the human desire to live lives of ever expanding meaning and value. Further, spirituality involves the human desire to find intimacy, functional unity, and harmony with the rest of existence. Finally, spirituality involves the desire to make human action, especially creative action, count in the course of events. Such spirituality is continually creative and constantly open to alterity and possibility.

We survive and exalt our existence by creatively unifying ideal and actual. Spiritual expression is a general and holy, human function according to Dewey (1934a/1980):

But the *function* of such a working union of the ideal and actual seems to me to be identical with the force that has in fact been attached to the conception of God in all the religions that have a spiritual content (p. 35).

Spirituality as the creative quest for harmonious yet dynamic unity among diverse and dispersed existences is a major theme in Dewey’s philosophy. This should not be surprising provided Dewey’s (1934a/1986) insistence that there is no “definite kind of experience

which is religious....marked off from experience as aesthetic, scientific, moral political....But 'religious' as a quality of experience signifies something that may belong to all these experiences" (p. 9). Here is what Dewey (1934a/1986) meant by religious quality: "Any activity pursued in behalf of an ideal end against obstacles and in spite of threats of personal loss because of conviction of its general and enduring value is religious in quality" (p. 19). Religious quality is present whenever we are actively striving to unite ideal and actual. It is a measure of faith and a testimony to the movement of spirit through the world and us. Not every movement toward unity is spiritual, though, "I would use God to denote those forces which at a given time and place are actually working for the better" (personal correspondence, cited in Rockefeller, 1991, p. 513). For Dewey, only those instances of unity that contribute to relatively stable harmony and the good, while honoring diversity in an infinitely pluralistic universe are spiritual.

Even the most ordinary acts of creatively striving to unify the ideal and actual are, for Dewey, spiritual acts. Spirituality may pervade the work of the caring teachers as surely as that of the careful choreographer; often the two functions are often the same. Dewey's naturalism does not eliminate spirituality; rather, it relocates spirituality from an otherworldly transcendental realm to the active striving of living creatures to unify the actual with the ideal in their daily lives. Spirituality for Dewey (1934a/1986), though, remains numinous in that it is active, creative, and retains a sense of divinity:

The process of creation is experimental and continuous....These considerations may be applied to the idea of God...to the idea of the divine. This idea is...one of ideal possibilities unified through imaginative realization....It is this *active* relation between ideal and actual to which I would give the name "God" (1934a/1986, p. 34).

Creative action that strives to unify diverse aspects of existence

in enduring, though not eternal, dynamic equilibrium remained the essence of spirituality for Dewey throughout his lifetime.

Qualitative Thought and Creative Inquiry as Religious Activities

In his essay *Qualitative Thought* Dewey (1930/1984) begins boldly by explicitly defying prevalent assumptions about the character of thought, “The world in which we immediately live, that in which we strive....This world forms the field of characteristic modes of thinking, characteristic in that thought is definitely regulated by qualitative considerations” (p. 242). Intimate involvement within a qualitative situation initiates inquiry for Dewey. The immediately experienced qualitative whole is vague, inexact, and indeterminate, yet it influences the later discriminations of thought. Qualities envelop us; we are enwrapped—rapt—within them, as within a wonderful dance, and they are within us. One first acquires a world through mood and feeling. Dewey (1934b/1987) writes:

Not only does the ‘mood’ come first, but it persists as the substratum after distinctions emerge; in fact they emerge as *its* distinctions. Even at the outset, the total and massive quality has its [affective] uniqueness; even when vague and undefined, it is just that which it is and not anything else. If the perception continues, discrimination inevitably sets in (p. 196).

Mood determines how one discriminates and interprets a situation. Mood has an important role in Dewey’s epistemology and pedagogy.

For Dewey, the context for all inquiries is *taken* from the antecedent qualitative whole, the given. All subsequent meanings depend on the inquirer’s original selections. For Dewey selectivity (and rejection), care, and concern is implicated in every act of thought; there is affection for some things over others. As thinkers we are differentially sensitive to qualities. Dewey (1930/1984) insists “intuition pre-

cedes conception and goes deeper” (p. 249). It goes deep enough, Dewey (1934a/1986) thinks, to have religious significance:

All purpose is selective, and all intelligent action includes deliberate choice. In the degree in which we cease to depend upon belief in the supernatural, selection is enlightened [and emancipated] and choice can be made in behalf of ideals whose inherent relations to conditions and consequences are understood (p. 38).

Recall Dewey’s definitions of faith and of God as an active relation between real and ideal. The presence of a qualitative dimension in thought implies that emotional education is a part of all education; if so then spiritual education, as Dewey understood it, is a part of education.

As the background of qualitative thought gives way to the foreground of cognitive, even methodological, thought, it does not become less creative. For Dewey (1934b/1987), “Science itself is but a central art auxiliary to the generation and utilization of other arts” (p. 33). Let us look deeper into what it means to call science an art.

Poiesis for the ancient Greeks meant the activities of productive science and art, or, most generally, making. Words written or recited with meter are only a small part of poetry. In Plato’s *Symposium* we find “the young Socrates” receiving a lecture from a prophet, the “Mantinean woman called Diotima” (201d). This dialogue is one of the few in Plato where Socrates is clearly ignorant of the topic—love. At one point Diotima pauses to explain to Socrates the true nature of poetry, “There is more than one kind of poetry in the true sense of the word—that is to say, calling something into existence that was not there before, so that every kind of artistic creation [*poiesis*] is poetry, and every artist is a poet” (205b). Creation, “calling something into existence,” or simply making meaning, *is* the truly comprehensive theory of poetry. Calling ideal things into existence, creation, or poetry, *is*, by Dewey’s testimony, the supreme act of numinous spirit.

A genuinely comprehensive theory of poetry does not distinguish the fine from the practical arts, and for good justification. In using the term *Techne*, the ancient Greeks meant craft, skill, or art. It is the form of knowledge associated with *poiesis*. Larry Hickman (1990) provides a bit of useful etymology in the course of describing Dewey's philosophy of technology: "Technē was for the Greeks a pro-duction, a leading toward, and a con-struction, a drawing together, of various parts and pieces in order to make something novel" (p. 18). *Techne* involves skill in the activity of poetic creation, of calling something into existence. Spiritual *Techne* helps unify the real and the ideal. Technology education should not only lead to good jobs, it should also lead to the release of spiritual goodness as well as a sense of vocation or calling. Small wonder Dewey (1916/1980) wrote, "Education *through* occupations consequently combines within itself more of the factors conducive to learning than any other method." (p. 319). Worldly success, spirituality, and existential commitment may all express aspects of the same poetic unity.

When Dewey (1925/1981) proclaims, "thinking is preeminently an art," I believe he has *poiesis* and *techne* as well as *logos* in mind (p. 283). Methodological thinking is particularly skillful thinking. Methods of inquiry, including scientific inquiry, are a part of a comprehensive theory of poetry. All methods artistically transform an indeterminate situation into a unified, harmonious, aesthetic whole. Methods are creative for Dewey (1938/1986) who insists, "*Inquiry is the controlled or directed transformation of an indeterminate situation into one that is so determinate in its constituent distinctions and relations as to convert the elements of the original situation into a unified whole*" (p. 108). Inquiry is complete when chaos is artistically transformed into a cosmos of aesthetic unity. Methodological inquiry is a systematic way of poetically transforming the real into a unified ideal of desire. The movement of inquiry progresses from what is to what ought to exist; it is an active, creative, relation between ideal and actual. According to Dewey's definition we may, therefore, assign the name "God" to the active, poetic, and creative methods of inquiry. Education in the use of rational methods, poeti-

cally understood should provide spiritual enlightenment.

Dewey's Religion of Spiritual Poetry, Prophecy, and Pedagogy

In *A Common Faith*, Dewey (1934a/1986) cites George Santayana:

Religion and poetry...are identical in essence, and differ merely in the way in which they are attached to practical affairs. Poetry is called religion when it intervenes in life, and religion when it merely supervenes upon life, is seen to be nothing but poetry (p. 13).

Poetry as *poiesis* may serve moral purposes by intervening in the world; it may disclose ideal possibilities and awaken desires. In poetry we may catch our first glimpse of what ought to be, the good beyond what actually exists. Dewey emancipates religion and spirituality so that they may intervene in life and conduct existence toward the ever-evolving ideal, thereby becoming something more than poetry.

Let us begin with his reconstruction of the act of creation. Dewey (1934a/1986) conceives creation as continuously and endlessly creating new forms, "Faith in the continued disclosing of truth through directed cooperative human endeavor is more religious in quality than any faith in a completed revelation....Revelation is not completed" (p. 18). Dewey (1934b/1987) borrows the phrase "ethereal things" from Keats to "designate the meanings and values that many philosophers . . . suppose are inaccessible to sense, because of their spiritual, ethereal and universal characters—thus exemplifying the common dualism of nature and spirit" (p. 38). According to Keats the artist may look "upon the Sun, the Moon, the Stars, and the Earth and its contents as material to form greater things, that is ethereal things—greater things than the Creator himself made" (p. 38). Dewey thinks humankind a participant in an unfinished and unfinishable universe and not a spectator of a completed cosmos laid out conclusively by the divine creator at the beginning (or the end). The artistic creation

of ethereal things is profoundly spiritual, so arts education is not an educational “frill.”

Dewey (1916/1980) thinks creative “imagination is the medium of appreciation in every field” concerned “with a warm and intimate taking in of the full scope of a situation” (p. 244). For instance, “Deliberation is dramatic rehearsal (in imagination) of various competing possible lines of action. It starts from the blocking of efficient overt action, due to that conflict and newly released impulse to which reference has been made” (p. 132). Imagination is that part of deliberation that grasps alternative possibilities in some actual situation. Dewey (1934b/1987) defines imagination as follows:

It is the large and generous blending of interests at the point where the mind comes in contact with the world. When old and familiar things are made new in experience, there is imagination. When the new is created, the far and strange becomes the most natural inevitable things in the world (pp. 271-272).

Unless one can see the possible in or beyond the actual they cannot frame a moral ideal of what ought to be; slaves to the actual are never free. Imagination acquires moral import in the effort to unite the real and the ideal. Dewey asserts that “imagination is the chief instrument of the good . . . the ideal factors in every moral outlook and human loyalty are imaginative” (p. 350). In the active relation between ideal and actual imaginative art may become more religious than religions. Dewey concludes that “art is more moral than the moralities” (p. 350). Spirituality involves expanded moral and cognitive, not just aesthetic, perception; so, education in all subjects involves educating creative imagination.

For Dewey, “Imagination is as much a normal and integral part of human activity as is muscular movement” (p. 245). Embodied muscular movement itself is poetical for Dewey. Chapter 2 of *Art as Experience* has the significant title, “The Live Creature and ‘Ethereal Things’.” There Dewey quotes Keats yet again:

James Garrison

May there not be superior beings amused with any graceful, though instinctive, attitude my mind may fall into as I am entertained with the alertness of a Stoat or the anxiety of a Deer? Though a quarrel in the Streets is to be hated, the energies displayed in it are fine; the commonest Man has a grace in his quarrel. Seen by a supernatural Being our reasoning may take the same tone — though erroneous they many be fine. *This is the very thing in which consists Poetry* (1934b/1987, p. 39).

In this passage we come face-to-face with the numinous and poetic hidden within Dewey's nonreductive, emergent naturalism. According to Dewey (1934b/1987), "Possibilities are embodied in works of art that are not elsewhere actualized; this *embodiment* is the best evidence that can be found of the true nature of imagination" (p. 272). Ideal's, as ideas, are born in embodied poetic imagination; it is there that they are most often first called into existence. The spirit of poetry may permeate the ball game as well as lines written on paper. The habits of the body think, feel and act. Physical education is not an educational "frill" either.

Russell B. Goodman as well as Kathleen M. Wheeler discuss the influence of the Romantic poets on Dewey. He, like the Romantics, obscures the difference between philosophy and poetry. Nowhere is this more apparent than near the end of *Art as Experience* (Goodman, 1990, pp. 96-99; see also Wheeler, 1993 Chapter 9 titled, "Dewey's Romantic Aesthetic"). Dewey (1934b/1987) is impressed with Matthew Arnold's dictum that "poetry is criticism of life," but remarks that he does not identify how it is criticism (p. 349). Dewey (1934b/1987) answers:

Not directly, but by disclosure, through imaginative vision addressed to imaginative experience A sense of possibilities that are unrealized and that might be realized are when they are put in contrast with actual conditions, the most penetrating "criticism" of the latter that can be

made. It is by a sense of possibilities opening before us that we become aware of constrictions that hem us in and of burdens that oppress (p. 349).

The most powerful form of criticism does not follow pre-established rules of critical logic. Instead, the most powerful criticism names new ideals for which one may strive through practical reason to obtain. Dewey (1934b/1987) writes, "Art has been the means of keeping alive the sense of purposes that outrun evidence of meanings that transcend indurated habit" (p. 350). If our intention is to educate students to think critically, then the arts must become a prominent part of the curriculum for both teachers and students.

Dewey makes the connection between pedagogy explicit when he says that "poetry teaches as friends and life teach, by being, and not by express intent" (p. 349). The problem is that such patterns of intimate, passionate teaching are lost to us in a world of pencil and paper, machine graded, multiple choice tests. Dewey concludes:

It is by way of communication that art becomes the incomparable organ of instruction, but the way is so remote from that usually associated with the idea of education, it is a way that lifts art so far above what we are accustomed to think of as instruction, that we are repelled by any suggestions of teaching and learning in connection with art. But our revolt is in fact a reflection upon education that proceeds by methods so literal as to exclude the imagination and one not touching the desires and emotions of men (pp. 349-350).

Pedagogical communication is a miracle besides which transubstantiation pales. It is an important part of the spiritual quest for poetic union. If schools are truly in need of reform, then I recommend spiritual release and poetic unity as the new aims of education. Within the confines circumscribed by church and state, schools should be sites of spiritual renewal for everyone. Wisdom counsels leaving the rest to parents, or to the students themselves.

Poetic pedagogy intervening in the lives of young people, instead of merely supervening, a curriculum that emphasizes the poetic creation of ethereal things, and schools that facilitate communication, would release the forces of spiritual energy held so long in chains. It would free the eros of every student who seeks to live a life of expanding meaning and value. Spirituality and spiritual education could readily be restored to our schools if the will of the people rivaled that of business, industry, or political demagoguery. The active spiritual urge to form a more intimate and creative union of the self with society and the ecosystem is more powerful at its source than the passive escapist fantasies of mass media amusement.

Regrettably, the forces of power, privilege, and domination hold the disunity of the actual in place. These forces devote themselves to creating systems of education that oppress us at the very font of freedom—the imagination. They imprison the spirit. These forces reduce religiosity to dogmatic religion and morality to rules and principles. The arts, the ethics of care, and genuine religiosity are absent from the political rhetoric about schooling. Instead, false political prophets devoted exclusively to financial profit offer citizens a technocratic diet of more testing and standards in service to increased economic productivity. We live in spiritually impoverished times; only poetry and serious play can save us now.

I need a school attribution. thanks, su

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RESCUING DEWEY FROM ANTHROPOCENTRISM

Tom Colwell

Recent critics of Dewey's naturalism¹ have argued that while the inclusion of humans in nature which is central to his naturalism is suggestive of an ecological model of the foundations of education, it nevertheless provides no answer to the question of how teaching and learning which recognizes the interconnectedness of human and non-human activities is in any better position to avoid the anthropocentric disregard and misuse of both human and non-human environments that has characterized the modern era. Educators who have been attracted to Dewey's naturalism have assumed that when awareness that humans are part of nature percolates into educational studies, a moral imperative of greater respect for humans and non-humans alike will go with it. But will it? Will students exposed to studies which emphasize that human life is enmeshed in complex non-human networks learn that what is good for humans depends on the integrity of those networks? Or, already heavily dosed with the blandishments of a global technological wonderland, will they learn that the very knowledge of human-non-human interdependence which Dewey's naturalism encourages, reinforces and informs their aspirations to extend indefinitely the world they are already familiar with? Will they, in other words, use their new found ecological knowledge to adjust human activities to the needs of the system of nature, or will they use it to promote ever more efficiently narrow human interests alone?

Dewey's way of dealing with anthropocentrism is best indicated by focusing on his conception of science. Dewey had long argued that science was primarily a general method of knowing and learning that extended beyond the subject-matters of the sciences to include human affairs as well. While non-human environmental subject-matters were not in the forefront of his thinking, there are passages scattered throughout his writings - and especially in his later work -

where non-human environment is made an integral part of any determination of the adequacy of human moral and social judgements.² Hence, it may be said that science, for Dewey, guards against anthropocentrism through observation and criticism of the interactions and transactions between humans and non-humans.

This broadening of the scope of science is the distinguishing feature of Dewey's idea of science which sets it apart from conventional associations of science with the natural sciences, and enables science to treat moral and social concerns as intertwined with those with the non-human environment. In this sense, Dewey's conception of science may be called ecological, the philosophical basis of which Dewey's collapsing of the nature-culture distinction which had been the chief dualistic pillar of all modern philosophy and modern thought and culture in general. With nature and culture joined in a single subject-matter, it follows that the corollary distinction between the sciences and humanities is also collapsed, thus opening the way for scientific study of humanistic subject matter. This means both the human moral and social activities may be treated according to the same method of observation, criticism, and hypothesis as are plants and atoms, and that such judgments of moral concern have access to the subject-matters of the natural sciences as resources which contribute to their outcome. It is this interweaving of subject-matters and methods, both formerly separated in the sciences-humanities typology, which gives Dewey's conception of science its ecological character, i.e., its ability to interconnect human and non-human behaviors, and thereby resist anthropocentric temptations which inevitably arise when humanistic moral pretensions are *disconnected* from the non-human environments.

These considerations would seem to put Dewey in the clear as far as anthropocentrism is concerned. If by anthropocentrism we mean the arbitrary imposition of human bias which privileges certain humans to the exclusion of both other humans and non-humans, then Dewey's ecological conception of science seems ideally suited to controlling human bias and subjectivity. But to one of Dewey's most

persistent critics, C. A. Bowers, Dewey's view of science as Dewey presents it is wholly Western in outlook, ignoring, in its single minded advocacy of science as the only method of gaining knowledge, the views of the many non-Western, traditional cultures whose ways of life, based on centuries of environmentally benign and spiritually sympathetic practices, offer a much needed corrective to Dewey's exclusive reliance on a science which all too easily lends itself to the interests of Western global capitalism. In fact, Bowers' main contention is that Dewey's science, for all its emphasis on ecological interconnectedness, cannot escape the Western habit of aligning itself with rampant technological and economic progress. Hence, the importance in teaching and learning of introducing alternative cultural views as a more effective way of counteracting Western anthropocentrism.

Bowers' criticism is puzzling and I think far-fetched. There is not in principle any opposition between Dewey's scientific approach to education and the study of non-Western cultures, which can and should be critically observed and interpreted in the same manner Western culture is. The fact that Dewey himself paid little or no attention to traditional culture is beside the point. The method of learning he was advocating is capable of treating any and all cultures with reasonable impartiality. No doubt Bowers would say this is question begging. His point is that science in the West is incapable of fairly representing non-Western culture because of its long standing ties with a culture of unlimited progress. But the basic idea of Dewey's conception of science is to treat all ideas as hypotheses, an idea that has met resistance in Western societies. Does the notion that ideas are hypotheses carry with it Western cultural baggage? Perhaps to an extent it does, and it is easy to see that it would be resisted in any culture which wants to protect certain ideas from scientific scrutiny.

There is no question that sciences in the West are often in the pay of corporations, the military, and governments. But again Dewey's main philosophical argument rests on a distinction between the sci-

ences and science-as-method. The sciences have had a long history in the West and their achievements may be debated in respect to their social and moral consequences. But as Dewey often pointed out, there has been little experience with science as a general method knowing in human affairs. Science as an ecological method, a method that includes humans and non-humans is, like environmental enlightenment itself, an ideal we are only beginning to realize.

What are the alternatives to Dewey's ecological conception of science in education? How are we to ground knowledge and learning in some other way? Either we remain with the modern *status quo* and continue to rely on the dualism of the science and humanities to frame educational studies, or we adopt Bowers' extra-scientific attempt to draw upon the wisdom of non-Western cultures. With regard to the latter, it is interesting that Bowers never addresses the really important question that his advocacy involves - viz.: How do we know *without reliance on science*, which traditional non-Western practices to adopt? All of Bowers' examples conveniently conform to generally accepted environmental knowledge as confirmed by the Western science he is suspicious of; nor are any of his examples cases of environmentally destructive practices of which traditional cultures have their share. So unless criteria for selecting exemplary non-Western cultural practices are derived from extra-scientific *a-priori* sources - which is an open invitation to cultural relativism - we are brought back to science as the best method to guide education and culture.

To the extent my arguments in Dewey's behalf have been convincing, the conclusion might be drawn that Dewey needs no rescuing from anthropocentrism, that his position was satisfactorily protected from that malady all along. But Dewey is still vulnerable to anthropocentrism is his ambiguous use of "nature." In this respect, he is no different from other moderns (and post-moderns, too). While Dewey rejected the centerpiece of modernity, the nature-culture distinction, like most moderns he continues to employ "nature" approvingly as the central receptacle into which humans are merged. Dewey's use of "nature" and "culture" to express this merger unwittingly

tingly reproduces the connotations of separate realities these terms powerfully convey, and thus ambiguously keeps alive the dualism from which the idea of an inclusive nature is intended to provide relief. In educational terms, humans-as-part-of-nature implies a unified subject-matter which is immediately pulled apart when it is articulated by the only terms at our disposal, "nature" and "culture." Students thereby learn the modern paradox: they are part of a nature from which the conventional meaning of "nature" excludes them.

The ambiguity of "nature" is Dewey's philosophy compromises his naturalism by playing on "nature's" double meaning - inclusive and exclusive of humans - simultaneously. In such a setting the possibility of anthropocentrism is continuously raised when the exclusionary, dualistic connotation of "nature" is entertained - that is, when "nature" is understood, as it commonly is, to indicate a separate non-human world. It is these occasions which powerfully reinforce the modern proclivity to impose and follow the dynamic forces of unbridled technological development.

In order to correct Dewey's ambiguous use of "nature" and thereby strengthen his anti-anthropocentrism, I propose to draw on Dewey's idea of transaction, which he developed over the last 20 years of his life, and fully expressed in his final book, *Knowing and the Known*,³ written with Arthur Bentley.

There are two main components of Dewey's transactional philosophy which bear on the question of anthropocentrism. The first is the meaning of "transaction" itself. The best way to express this is by contrast with the more familiar notion of interaction, which has been the characteristic mode of knowing and learning in the modern West. Interaction assumes the existence of at least two things or objects and their human knowers or subjects. The subject interacts with the object by observing it or manipulating it in some way. The focus of interactive knowing and learning is therefore the epistemological exchange between subject and object.

Dewey had long sought to avoid the dualistic implications of

the subject-object typology by reinterpreting interaction using the biological model of organism and environment. But in later life he came to see, with Bentley's help, that "interaction" insufficiently avoids dualistic connotations. As long as this connotation remained in place, Dewey's naturalism was indeed vulnerable to the human centeredness of modern epistemological dualism.

Hence, the second feature of transactionalism was a program of language reform which focused not only on "interaction" but, in *Knowing and the Known*, was extended to a wide range of terminology in the modern dualistic tradition. "Transaction," a term first introduced in a scientific context by Clerk-Maxwell in 1877 to indicate that energy forces in electromagnetism had to be understood as a system, was Dewey and Bentley's choice to not so much replace "interaction," as to subsume it under the broader idea of an environmental system of events which contained subject and object as individuals. Transactional knowing and learning therefore proscribed an epistemological setting which called attention to the human and non-human environments frequently ignored in the interactive preoccupation with subject and object alone.⁴

But awareness that knowing and learning includes the environmental systems in which subject and object reside, still does not fully eliminate the threat of anthropocentrism to Dewey's naturalism. It is still possible to argue that expanded knowledge of environmental systems will simply feed the unquenchable thirst for ever greater human exploitation of non-humans and other humans.

To further guard against this possibility, I would introduce an additional terminological change, one which, considering its centrality to their naturalistic position, it is surprising Dewey and Bentley did not make. This has to do with the word "nature" itself.⁵ I have already mentioned that Dewey uses "nature" ambiguously and in doing so reproduces dualism unwittingly. It therefore seems appropriate to suggest an alternative to "nature" as a means of eliminating this ambiguity.

This alternative I have in mind is “earth system,” though I am sure there are other equally deserving candidates.⁶ “Earth system” has the advantage of drawing attention away from the dualistic two-worlds connotation “nature” inevitably implies, while emphasizing a single human-non-human reality. In doing so, “earth system” challenges educators to design studies which stress that, however humans may differ from other humans and non-humans, they are bound together in a common family whose moral integrity depends on how well they comprehend their familial ties, and on their ability to employ this understanding to resist the snowballing effect of modern progress.

Since the dawn of the modern era, nature has been thought of as a world apart from humanity, reinforcing its sense of privilege and superiority.⁷ To try in education to free ourselves from this dichotomy is a task easier said than done, and it will not be accomplished merely by changing a few words in our language.⁸ To begin to speak of an earth system in educational work is a small step in this direction. But if it helps us see our many interactions as part of a larger transactional human-non-human system, it will also be a giant first step. To inaugurate a new broader vision of our relationships to ourselves and other forms of life is the object of Dewey’s idea of transaction. Such a vision cannot eliminate anthropocentrism, but it can control it through ongoing experimental observation and criticism across disciplines and behaviors formerly segregated which necessarily incorporates the views of different cultures, genders, and species in democratic dialogue.

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End Notes

1. Cf. C. A. Bowers, *Education, Cultural Myths, and the Ecological Crisis*. Albany, NY: SUNY Press, 1993, Ch. 3, pp. 87-105; cf. also, Paul Morgan, “Reconceiving the Foundations of Education: An Ecological Model,” in *Philosophy of Education 1996*, ed. Frank Margonis (Urbana, Ill.: Philosophy of Education Society, 1997), pp. 294-3-2. I am

indebted to Morgan's paper for criticisms of my earlier views, which prompted me to write this paper.

2. Cf. for example the following passage in Dewey's *Logic*: "...the existential conditions which form the physical environment at every point into the constitution of socio-cultural phenomena. No individual person and no group *does* anything except in interaction with physical conditions. There are no consequences taking place, there are no social events that can be referred to the human factor exclusively. Let desires, skills, purposes, beliefs be what they will, what happens is the product of the interacting intervention of physical conditions like soil, sea, mountains, climate, tools and machines, in all their vast variety, with the human factor. The theoretical bearing of this consideration is that social phenomena cannot be understood except as there is prior understanding of physical conditions and the laws of their critical interactions. Social phenomena cannot be attacked, *qua* social, directly. Inquiry into them, with respect both to data that are significant and to their relations of proper ordering, is conditioned upon extensive prior knowledge of physical phenomena and their laws." *Logic: the Theory of Inquiry*. New York: Henry Holt and Co., 1938, pp. 491-492.
3. John Dewey, Arthur F. Bentley, *Knowing and the Known*. Boston, MA: The Beacon Press, 1949.
4. Dewey's and Bentley's account of interaction and transaction occurs in chs. 4 and 5 of *Knowing and the Known*.
5. In *Knowing and the Known*, Dewey and Bentley occasionally use "cosmos" as a synonym for "nature," but they do not suggest it or any other term as a replacement for "nature."
6. For example, "cosmos" (as mentioned in footnote 5).
7. The primacy of nature in modernity is discussed throughout Bruno La Tour's *We Have Never Been Modern*. Cambridge, MA: Harvard University Press, 1993.
8. For an interesting discussion of the pros and cons of changing conventional language, with particular reference to "nature," Cf. Alice E. Ingerson, "Tracking and Testing the Nature-Culture Dichotomy," in Carole L. Crumley, ed., *Historical Ecology: Cultural Knowledge and Changing Landscapes*. Santa Fe, NM: School of American Research Press, 1994, pps. 43-66.

CONDUCT AND CULTURE: DEWEY AND CASSIRER

Thora Ilin Bayer

Two of the most widely read philosophical books in the twentieth century have been Ernst Cassirer's *An Essay on Man* (1944) and John Dewey's *Human Nature and Conduct* (1922). Although Cassirer's *Essay* appeared more than two decades after Dewey's *Human Nature and Conduct*, it is a summary and restatement of the views Cassirer developed in the three volumes of the *Philosophy of Symbolic Forms*, published in Germany in the 1920's. Cassirer quotes a long passage from *Human Nature and Conduct* in his chapter on "The Definition of Man in Terms of Human Culture." He agrees with Dewey's view that it is a mistake to analyze human being into various instincts and reduce human nature to the actions of one or more of them (*EM*,67;*HN*,131). Like Dewey, Cassirer sees this as a revival in modern terms of scholasticism or "faculty-psychology."

Cassirer also quotes a long passage from *Experience and Nature* regarding the importance of "feeling -qualities" as basic elements of human reality. He says: "The best and clearest statement of this problem has to my mind been given by John Dewey" (*EM*,78). Cassirer agrees with Dewey that the way in which things are felt, as poignant, beautiful, annoying, harsh, fearful, etc., are traits in experience as fundamental as colors, sounds, smells, tastes, etc. Cassirer regards these feeling-qualities as the content of mythical perception that is at the basis of human culture.

What can be learned by putting together these two very vital accounts of human nature, society, and culture? What might such a union imply for a concept of human education?

Dewey and Cassirer on Human Nature

An Essay on Man and Human Nature and Conduct are two sides of a coin. Cassirer and Dewey are different thinkers but they have

more in common, at least in these two works, than in disagreement. They both are attempting to work their way forward from the turn of the century developments of Kantian and Hegelian idealism and in so doing to come to grips with the new achievements in biology and the social sciences. Both books in their sub-titles purport to be an introduction to a new field of thought: (Cassirer) "An Introduction to a Philosophy of Human Culture" and (Dewey) "An Introduction to Social Psychology"; however, Dewey makes clear in his preface to the first edition that his work does not purport to be a comprehensive treatment of social psychology but only to show that an understanding of habit is the key to such investigation and Cassirer says it is not his intention to impose a ready-made theory on his readers.

Cassirer differs from Dewey in that he never moved from his modification of idealism into a symptom of cultural forms to a pragmatic viewpoint. Dewey differs from Cassirer in that he did not develop within his standpoint of "pragmatic naturalism" (as Morris Eames has called it) a full theory of the symbol or symbolic form, although he comes close to this especially in *Logic, the Theory of Inquiry*. There are many specific differences but my purpose is to consider the connections of these two works. They have both been so widely read not only by professional philosophers but also by students and persons in other fields because they offer us a way to see the human individual, society and culture as elements of a whole.

Both Cassirer and Dewey begin their conceptions of human nature from the Aristotelian definitions of the human being as a rational and a social animal. Both Cassirer and Dewey see the human being as a certain kind of animal that differs from other organisms in degree and kind. But the human being is truly part of the biological world and must be approached in these terms. It is not language as such that distinguishes humans from other animals, nor is it sociality or social order. Other animals exhibit linguistic behavior and comprehension, although neither Cassirer nor Dewey could have been aware in their time of the extent to which this has been shown in recent research. Human beings are social animals but social order is

not an exclusive feature of human life. Various other organisms relate to each other in social terms and form societies. Distinctive to human beings for Cassirer is what he calls culture which is based on the uniquely human grasp of symbols.

Dewey employs the word “culture” widely in his writings but in *Human Nature and Conduct* he focuses on the eighteenth-century conception of “morals.” Morals in this sense was the study of distinctively human activities. It was the study of those activities in which human beings attempt to explore and confront their own humanity. Dewey refers to Hume as having this purpose in *A Treatise of Human Nature* and other writings in which he was seeking a science of custom. Cassirer takes his title from Pope’s “An Essay on Man” and from his line that “the proper study of mankind is Man.” Both Dewey and Cassirer regard human life as distinctively involved in the phenomenon of freedom. Cassirer says at the end of his Essay: “Human culture taken as a whole may be described as the process of man’s progressive self-liberation” (*EM*,228). The final part of Dewey’s *Human Nature* concerns morality and freedom. Dewey says: “Intelligence is the key to freedom” (*HN*,304) and “Freedom is the ‘truth of necessity’ only when we use one ‘necessity’ to alter another” (*HN*,312).

Freedom for both Cassirer and Dewey depends upon our ability to alter the conditions of life and to alter the conditions of our own making. Cassirer strongly emphasizes the human power to form the world through the symbol as allowing distance from the immediacy of existence. We can separate ourselves from the world. Dewey insists on our ability to stand apart from existing laws and customs, from the necessity they impose upon us, and to envision and act in terms of ideals that support our power of choice.

Cassirer’s Conception of Symbolic Form

The key idea for a philosophy of culture for Cassirer is *symbol*. The key idea for a social psychology for Dewey is *habit*. What does Cassirer mean by *symbol*? What does Dewey mean by *habit*? And,

what is the connection between them? Cassirer defines man as a symbolizing animal: “instead of defining man as an *animal rationale*, we should define him as an *animal symbolicum*. By so doing we can designate his specific difference, and we can understand the new way open to man — the way to civilization” (EM,26). In connecting rationality to symbolization Cassirer is seeking to ground reason in the medium or cultural phenomenon that makes human culture possible. Cassirer claims that there is a “crisis in man’s knowledge of himself.” In past ages the question of “what is man?” has been investigated in terms of an established context such as reason in the ancient world or religion and faith in the Middle Ages. In the modern world the theory of man has lost its intellectual center: “Nietzsche proclaims the will to power, Freud signalizes the sexual instinct, Marx enthrones the economic instinct. Each theory becomes a Procrustean bed on which the empirical facts are stretched to fit a preconceived pattern” (EM,21).

There is no one field of inquiry that provides primary access to the human: “Theologians, scientists, politicians, sociologists, biologists, psychologists, ethnologists, economists all approached the problem from their own viewpoints” (EM,21). Cassirer holds that “self-knowledge is the highest aim of philosophical inquiry” (EM,1). He regards each of the areas of human cultural activity as a framework of self-knowledge, a form in which the self realizes an aspect of its own nature. The key for the definition of man that does not reduce the human to some particular instinct or drive and that does not give priority to some one field of inquiry is to define man as the whole of human cultural activity.

Cassirer sees culture as composed of symbolic forms. One form of cultural life is not more “symbolic” than is another; all are orders of experience based on symbols. Cassirer uses an example of a *Linienzug*, a graph-like line drawing to demonstrate what he means by symbolic form and how it is rooted in our apprehension of any object. He says we can perceive the line first as experience of a feeling-quality responding to it in terms of its tension, its sense move-

ment or stasis. We can shift perspective and grasp it in theoretical terms or a mathematical object, a geometrical shape. We can pass to seeing it as a mythical-magical sign and further we can come to see it as an aesthetic ornament, something with purely artistic significance. In each of these perspectives the object before us taken up into a system of symbols having its own logic or "inner form."

These modes of symbolic formation are manifest in the general arena of human cultural activity. The symbolic forms that Cassirer lists and that emerge as the chapter titles of his *Essay* are myth and religion, language, art, history, and science. He also mentions the possibility of symbolic forms of technology, economics, law, and morality. The task of the philosopher for Cassirer is to understand the particular logic of each symbolic form and to grasp how they interconnected to form a whole of culture. This philosophical task includes showing the harmony of all the symbolic forms while preserving the "tonality" of each. Philosophy as a cultural force acts against the tendency for any one form of culture to dominate the others in a given age. This ideal of harmony is tied to the power of human freedom to pursue culture as an act of self-knowledge.

Cassirer explains the presence of the power to form experience through symbols in terms of the biologist Jakob von Uexküll's conception of the organism. On Uexküll's view each organism has its own world: "In the world of a fly, says Uexküll, we find only 'fly things'; in the world of a sea urchin we find only 'sea urchin things'" (*EM*,23). Each organism from the lowest and most simple to the highest and most complex exists in a *functional circle*. Each organism according to its anatomical structure possesses a *receptor system* whereby it responds passively to the world or takes in its experience and an *effector system* whereby it acts toward the world, takes action in relation to the stimuli it receives.

Cassirer says that in the functional system of the human organism we find what can be described as a third system, a *symbol system*. This lets the human being live in a totally new dimension of

reality, one in which it constructs a kind of second nature or culture beyond the natural forces to which it responds and which it affects. Once in possession of the power of the symbol to transform immediate experience into meanings, symbols can be used to generate meanings from other symbols. This is as far as Cassirer goes here in grounding his conception of the human being as *animal symbolicum* in the organic world. In so doing he suggests a biological basis for his theory of knowledge and culture but he does not offer a social psychology that would stand between this biology and his cultural epistemology. For this one must turn to Dewey. Cassirer does not have a theory of human conduct to underlie his theory of human culture.

Dewey's Conception of Habit

Dewey and Cassirer both understand human nature in functional not substantial terms. This is to say that man is not a particular substance with an essence such that a metaphysical grasp of this would allow us to determine what man is. Instead for Dewey and Cassirer the nature of human beings can be known by what human beings do. From this perspective human beings acting in terms of and against the forces and necessities of nature that bear down upon them make their own nature through their unique abilities. Human beings realize themselves as human through their own conduct and their culture that depends upon it. To have culture in Cassirer's terms requires society. To make human society as Dewey shows requires human habit, character, custom, intelligence, and morality.

As Cassirer builds his conception of culture on the symbol, Dewey builds his conception of society on habit. Society is not a rational contractual association among individuals. The individual is born into society from the beginning. Human life and nature are social from the start. An organism cannot survive without habits. Dewey says: "Habits may be profitably compared to physiological functions, like breathing, digesting" (*HN*,14). Physiological functions are involuntary but develop as necessary requirements to the social environment. We cannot choose not to have habits. Dewey

says: "All habits are demands for certain kinds of activity; and they constitute the self" (*HN*,25). The self is a system of habits. Dewey says: "Character is the interpretation of habits. . . . A man can give himself away in a look or a gesture. Character can be real through the medium of individual acts" (*HN*,38).

Our ability to modify habits is not only crucial to our survival but it is the basis of the moral situation. From habit Dewey can derive custom because customs are habits collectively enacted: "To a considerable extent customs, or widespread uniformities of habit, exist because individuals face the same situation and react in like fashion" (*HN*,58). Habit does not itself yield intelligence. The functions of mind that are crucial to intelligence require the connection of impulse with habit. Dewey says: "A certain delicate combination of habit and impulse is requisite for observation, memory and judgment" (*HN*,177). To be intelligent is to develop the ability to allow impulse both to play against habit and to allow habit to form or incorporate what occurs by impulse. The unintelligent mind is simply impulsive or tenacious, holding on only to what it already has.

Dewey describes reason in terms much like Cassirer's notion of a harmony between the symbolic forms of culture. Dewey says: "Rationality, once more, is not a force to evoke against impulse and habit. It is the attainment of a working harmony among diverse desires." These desires in Cassirer's terms would be manifest within various symbolic forms. Dewey continues: "'Reason' as a noun signifies the happy cooperation of a multitude of dispositions, such as sympathy, curiosity, explanation, experimentation, frankness, pursuit - to follow things through - circumspection, to look about at the context, etc., etc." (*HN*,196). The fact that we as human beings have this power of holding together in a single self this multitude of dispositions makes feasible the claim that we can grasp and pursue culture as a whole rather than as a field of fragmented activities.

Dewey's conception of human conduct based in his analysis of habit provides us with a picture of the self as grounded in social pro-

cess that is required for Cassirer's conception of human culture that tends always toward the theory of knowledge without a theory of society to underpin it. The two books go nicely together and provide a basis for thinking through questions of knowledge in relation to questions of psychology and in relation to biology.

Implications for Human Knowledge

What might be the implications of this way of thinking for human education? Dewey's philosophy of education is a topic in its own right. It has not only been the most written about aspect of his philosophy, it has been the most influential. In fact Dewey's ideas on education have had more impact on modern American society than the ideas on any subject by any other modern philosopher. Philosophy has rarely been such a force in its time. My aim here is not to examine or re-examine Dewey's philosophy of education, but only to suggest a perspective on education that emerges from the combination of Cassirer's conception of culture and Dewey's social psychology of conduct.

In *Human Nature and Conduct* Dewey says: "Education becomes the art to taking advantage of the helplessness of the young; the forming of habits becomes a guarantee for the maintenance of hedges of custom" (*HN*,64). Cassirer in the beginning of his *Essay* points to Aristotle's view "that all human knowledge originates from a basic tendency of human nature manifesting itself in man's most elementary actions and reactions. The whole extent of the life of the senses is determined by and impregnated with this tendency" (*EM*,2). This combined Cassirerian-Deweyian view is against specialization in human education. Specialization is not bad in itself. It is the basis of professional training but it needs to be grounded in an earlier experience of general education.

Cassirer's range of symbolic forms from myth to science implies a theory of general education. Since each of these symbolic forms of cultural life is a form of self-knowledge, the individual human being must enter into all of them in order to explore fully the

dimensions of the self. We can only overcome the fragmentation of knowledge and culture that we find in the modern world by promoting an education of the whole. As Hegel says, "the true is the whole," a principle with which Cassirer agrees. A curriculum at almost any level of education could be organized around Cassirer's list of symbolic forms. The way in which the student would be taught myth or science or history, for example would vary according to the student's age and intellectual development as is done now. The important point would be to keep the student in touch with all these forms, not to allow one to dominate education any more than a given form should dominate culture itself.

There is not only a principle of general education implicit in Cassirer's view; there is also a principle of diversity. It offers a functional approach to the current interest in cultural diversity, but an approach not fully realized. Education of the student in the nature of human culture itself would uniquely equip the student to study and grasp individual cultures. In any particular culture is all of what human culture is. Without a grasp of the basic structure of human culture itself, the student has no knowledge of what to look for in studying a particular culture and thus may just fix on anything with no way to grasp it as a whole and as a part of human culture as a whole.

If we add to these views of a cultural approach to education Dewey's conceptions of habit and intelligence something more emerges. The student is not simply to be given information. Dewey's comment about education being the taking advantage of the young is a criticism of basing education in habits of rote learning and acceptance of the authority of custom. In our day the fascination with information and the acquiring of information plays the role of what Dewey is criticizing in his day. Finding information and manipulating it is not thinking. Intelligence, which involves observation, memory, and judgment, requires the combination of habit and impulse as Dewey claims. To think requires the student to be able to move from one context to another. In Cassirer's terms this is to move

from one symbolic form to another, and from one culture to another. Cassirer's formulation of Aristotle's desire to know points to the fact that there is always an impulse to go beyond what is settled in habit and custom, to go beyond information. Information is not bad in itself. It is a necessary part of education but it is not all of education.

Education must remain open to this natural activity of the impulse to know. Habit is the stability of mind that tempers impulse. What seems established in habit and custom in the student's own culture is challenged by an encounter with the habits and customs of another culture. This opposition of actual patterns of mind and life is what stimulates observation, memory, and judgment. The attempt by the student to confront this opposition as active forces not merely as additional information about something introduces the experience of moral deliberation. The world cannot be reduced to a simple viewpoint and the nature of the opposition and its relation to the whole of human culture and life must be thought through. This involves proceeding from the settled state of affairs to the formulation of ideals. Once an ideal is in mind the student begins to gain experience in the power of moral judgment. The self encounters itself as a force through which it makes its world, as the maker of knowledge and culture.

Dewey's conception of intelligence coupled with Cassirer's sense of culture becomes the basis for the process of moral education or the education of the self into its own nature and limits. With today's strong involvement in information, technology, and specialization, the education of the human self into its own nature is easily forgotten or at least slighted. Cassirer and Dewey offer us reminders of this other dimension to education and their combined conception of the human offers us a powerful perspective on how to accomplish it.

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End Notes

Ernst Cassirer, *An Essay on Man: An Introduction to a Philosophy of Human Culture*. New Haven: Yale University Press, 1944. Cited as EM.

John Dewey, *Human Nature and Conduct: An Introduction to Social Psychology*. New York: Henry Holt, 1922. Republished, New York: Random House Modern Library, 1930. Cited as *HN*.

A CRITIQUE OF DEWEY'S NOTION OF DEMOCRACY AND TRADITIONAL SYMBOLIC INTERACTIONISM FROM A POST-STRUCTURAL SYMBOLIC INTERACTIVE PERSPECTIVE

Lee Fleischer

The Times

Current events are crucial to an understanding of my comments concerning teaching a core course to incoming freshmen at City University. The course was foreshadowed by a number of volatile and political events and themes. On a daily basis, the media talked about such issues as welfare "reform," the labeling of homeless people as "criminals," the taking of babies away from welfare mothers and placing them in foster care, strike actions declared by transit workers in necessary covert terms circumventing anti-labor laws, and demonstrations at the World Trade Organization concerning child labor abuses and the intrusion of American multi-national corporations and capitalism into Third World cultures.

Although these news events caused some concern among the students, one particularly alarming news headline was the proposed cuts in funding for remedial programs for incoming freshmen at city universities and colleges. These proposed cuts were particularly distressing to those students who were recent immigrants and who had difficulty speaking English; African American and Hispanic students; and poor or struggling middle class white Italian, Jewish, and Irish Americans.

Many of the students were from various ethnic, immigrant, and minority groups throughout New York City. Moreover, most of them were from lower socioeconomic levels, and worked after school at low-paying jobs to support themselves and finance their education. Although the course was not strictly remedial, its primary focus was to bring students "up to college level reading, writing, and critical

thinking.” The events of the day affected and influenced our class discussions. Immigrant students from Eastern Europe, West Africa, and the Caribbean were often characterized by those from middle class families already living and established in Staten Island as “uneducated” or “poorly schooled.” Still, the atmosphere in class was pleasant enough to ward off any overt attacks or criticisms.

The Course Text

The core course, “Issues, Ideas, and Institutions in American Society,” had as its required text the 861-page *These United States* (College of Staten Island, City University of New York). I could not ignore the students’ unified groans and objections that they would never be able to complete the reading of such a “telephone book.” Despite my telling the students that they would not be required to cover the entire volume, I could not gain their trust without finding some “handle” to make the text more accessible.

Therefore, the students and I synthesized the text into three paradigms for envisioning society, taken from one of the chapters: structural-functional, social conflict, and symbolic interactive.¹ We first discussed these three paradigms until they were clearly defined in the minds of the students. In our discussions, it became evident that the text ignored the social conflict paradigm in favor of the other two. Rather than focus on human construction, conflict, struggle, and human intervention, the text absorbed these processes within the structural-functional model and also gave limited attention to the symbolic interactive model.

The authors revealed a limited symbolic interactive paradigm that presupposes a subject in balance or harmony with significant others and institutional roles. The authors also revealed a subject or person whose thinking and actions are unified, consistent, and coherent, despite contradictions and conflicts.² In doing this, the authors diminished the significance of oppositional societal forces by rendering a particular interpretation of George H. Mead’s symbolic construction of society, effectively collapsing the symbolic interaction

paradigm into a larger structural-functional paradigm on many levels while neglecting to discuss many aspects of subject-hood and subjectivity. The text also fails to discuss Dewey, Mead, and other progressives of the times and the emergence of symbolic interactionism as a social science paradigm.

The authors of the text engendered these omissions by holding fast to distinctions between the “micro” and the “macro,” obscuring more basic differences generated by class struggles and conflicts that occur on deeper and overlapping levels. These struggles and conflicts operate in and through people and their subjectivities. The authors’ approach makes the social conflict model appear redundant to the structural-functional model. Moreover, the authors of the text insisted, in their critical evaluation of the social conflict model, that conflict theorists are “uneasy that science can be objective and envision society in very broad terms . . . as a composite of ‘family,’ ‘social class,’ and so on.” As a corrective, the authors of the text offered their version of the symbolic interactive model, which they see as micro, as a perspective designed to “depict society less in terms of abstract generalizations [or scientific concepts] and more in terms of people’s everyday, situational experiences” (p. 578).

Mead and Dewey: Symbolic Interactive Progressives of What Kind of Democracy?

Although some attention was given to the theorists of structural-functionalism and symbolic interactionism by the authors of the text, only cursory attention was given to George H. Mead, and no attention was given to John Dewey and the progressives of the era in which Mead wrote. This paper, therefore, will provide a short yet critical examination of both theorists and how the paradigms they offer keep them from a broader and deeper view of democracy. There is a need for a more incisive examination of the role of subjectivity in language or symbolic actions and interactions.

Mead (1934) defined the individual as an unified self, an “I” in relation to a “Me.” This “I” was socially constructed to the extent that

we cannot realize ourselves “except insofar as we can recognize the other in his relationship to us . . . as he takes the attitude of the other [and thereby] the individual is able to realize himself as a self.” (1934).

Dewey (1916, 1944) further clarifies the development of this self by establishing a social basis for its actions. Prior to Mead’s writings, Dewey understood the symbolic relationship between the individual and society on the plane of self, and other symbolic activity, to include a dimension of social control or an “internal authority” in a democratic society. This authority, which Dewey perceived as a relationship between individuals and institutions, was necessary to assure “voluntary dispositions and interests” whereby a “number of individuals who participate in an interest [would have] to refer [their] own action to that of others, and to consider the action of others [in order] to give point and direction of [their] own” (1916, 1944 p. 87). To Dewey, these actions were “equivalent to the breaking down of those barriers of class, race, and national territory which kept men from perceiving the full import of their activity” (p. 87). By establishing this “extension of space,” Dewey was able to give the reader the impression that external controls are unnecessary and detrimental to democracy.

Consequently, in Dewey, there exists an untested assumption that a relationship exists between the outer or macro forces of society and the inner or micro forces of individuals on the plane of a developing self. Further, as this self interacts and develops, there comes into being an additional untested assumption: that this relationship exists between, alongside, and outside individuals (but not through), linking them to each other and the continuous development and growth of a democratic state and its institutions.

Dewey does not extend this linkage to other levels, intersecting human interaction and knowledge on other planes of subgroup resistance, nor does he describe a self that is crossed, “shot through” by conflict, contradiction, and co-option of the dominant group, breaking apart its unified sense of self. Rather, he insisted that society, as

a means toward maintaining its flexibility, “must see to it that its members are *educated* to personal initiative and adaptability” (1916, 1944, p. 88, emphasis added). Otherwise, he insisted, “they will be overwhelmed by the changes in which they are caught and whose significance or connections they [will] not perceive” (p. 88). Dewey maintained a vision of society as essentially mobile, confident that it was “full of channels for . . . change occurring everywhere.” To Dewey, one became acquainted with these channels and became adapted to such interests and dispositions as personal initiative to know the other as one knows one’s self.

To Mead, this process of getting to know the other and one’s self comes about as one undertakes the symbolic moves of a game, learning and its rules along the way. At its most generalized, this form of symbolic interaction and game playing becomes a metonymy or represents a spiraling outward movement as the self, mimicing the other, simultaneously taking on roles defined by society’s rules or norms. These norms, not further differentiated by Dewey or Mead on in-depth, capillary levels, include rules and/or habits of the established institutions and practices of society, including those of business, manufacturing, commerce, technology, science, and, as Dewey points out, “other modes of associations and intercommunication.” To Dewey, these interactions, grounded in society’s norms, represent the “points of contact” that provide for the “numerous,” “varied,” and “diversity of stimuli” necessary for the “liberation” of “one’s powers” in a democracy (p. 87).

Dewey implies more than Mead, however, that norms are more than merely the rules of a game. To Dewey, these norms are the “internal authority,” the “predispositions” and “correct habits” or sources of social control organically linked to the growth of American democratic society and its institutions. To Dewey, such norms or interests, as he refers to them, are the “incitations to action.” In a *less* democratic society, however, these incitations, to Dewey, are closed off from making “wider interactions” because of the “exclusiveness” of class, race and national barriers, “shut[ting] out many interests”

(p. 87).

To Dewey, then, once “proper” interests, habits, and dispositions are mastered in education — those associated with business, technology, science, and other modes of intercommunication and association — “contacts” are generated. Ultimately, these contacts will produce wider associations with “proper” others and more harmonious relationships between the individual(s) and society.

In this paradigmatic framework, the individual is permitted to achieve a level that allows him or her to become linked up with norms solely of the established institutions of society. The terms “class,” “race,” and “national origins,” as Dewey uses them, become rubrics that link the individual to a particular level of society, one grounded in the harmonious growth and functioning of business, technology, science, and the intercommunications and associations within them. In doing this, however, Dewey’s enchantment with this particular level of society obscures other, more basic and concrete levels of toil and struggle.

We can re-conceptualize Dewey here, then, by positing, between this level and the deepest levels, intermediate or shifting levels and in which the rubrics of class, race, national origins and ethnicity overlap — align, disalign, and re-align. At times, as individuals experience their selves undergoing this movement, they experience their selves pulling away from each other; at other times, they experience their selves metonymically, as if they are seeing their selves as apart from science, technology, and business; at other times, these experiences of the self may be imbricated, one image exposing edges or margins of the other.

These edges or margins are not neatly congruent, aligned to one other. Rather, they are the “in between” spaces that recent “hybrid” theorists³ have pointed to whereby group conflict and norm negotiation and contestation take place, based on the performance of one’s positionality in society. The bases by which norms are communicated and contested while individuals interact with one another — “intercommunication” and “association” — can then be re-exam-

ined as occurring on a number of levels beyond the role assignment categories held by Dewey or Mead, beyond the essentialist categories of class, race, and national origin. One's positionality and the norms that define it can be seen to include complex relations among these essentialist categories.

If we adopt a post-structural, symbolic interactive position, the illusion of difference created by the dominant categories of "I," the Other," "I" and "Me," "I" and "We" and Them," distinctions used by Dewey, Mead, and other progressive symbolic interactionists can be shifted. Such a shifting permits a more incisive examination of the complex and capillary world of crossing over and connecting pathways of group norms communicating class, race, ethnicity, gender, and sexual orientations and preferences.

If we adhere to essentialist categories espoused by progressive symbolic interactionists, the imbrication of race, class, gender, and so forth is hidden from view.

In contrast, the post-structural rendering of the social as a semiotic map, portraying a complex of layers and levels, operating as a venue for norms circulating in interaction and communication, may finally unearth a more incisive reading of "intercommunication" and "association" and their role in examining critically the extent to which our society is truly "free," "open," and "democratic."

Because for Dewey and Mead it was sufficient to stop the pursuit of an investigation into "intercommunication" and "association" within the context of a developing business, technological, and scientific society, their foundation for understanding symbolic interactions is accomplished on the basis of a simplistic, "self-consistent" self. The interaction produced by a "self-consistent" person or self never discloses the complex and capillary world of norms circulating in communication in language, overlapping and intersecting as "signifiers," which post-structural theorists have espoused or pointed to.⁴

Because Dewey, along with Mead and other adherents of pro-

gressive symbolic interactionism, cannot further describe the complex realities of role assignments in the cross-movement of norms, they cannot locate the hybrid, “in-between” spaces of social and signifying interactions, nor can they determine the extent to which their notion of interaction and self attainment through role activity is “democratic.” Instead, citing the historical development of education from Plato to modern times, Dewey maintained that once a disruption or fracture occurs in a social arrangement or institution such as a school, the “mind” will be “distracted” by “false valuations and false perspectives” (1944, p. 89).

Whereas Dewey sought to escape the idealism of a predefined social whole operative since the days of Plato, seeking organically derived forms of practice from the micro to the macro, he never succeeds, stopping short of a satisfactory critical position. His insistence on setting limits to difference, seeing it as merely distinctions of “class,” “race,” and “national origin,” operates to hide deeper and, in intermediate levels, overlapping shifting levels and layers of difference that circulate and are imbricated in language. Post-structural theorists such as Lacan, Pecheux, and Foucault have already read these levels and layers of interaction as more than symbolic. Deepening their analyses, they have entered the semiotic in which the symbolic of language is understood as a signifier, or chains of signifiers, operating as an interlocking mechanism between words and meanings in “discursive formations.” These formations further operate as norm assigners, performing ideological functions. In this process, words as signifiers act as relay units, sorting out group norms - some stopping others, while others slide over others, switching one sense of self to another that becomes more than individualistic, an assemblage of selves that makes possible a wider basis for interaction, associations, and solidarity.

The signifier, then, is understood as a fragment of language, communicating a variety of group norms, in addition to dominant group norms, and intersecting everyday interactions. Dewey, however, remains confined within a stable notion of the self as self-con-

sistent, grounded on dominant group norms representing business, technology, and science interests. This adherence to the dominant group norms and interests, however, eliminates from notice how his notion of “false valuations and false perspectives” could have been invoked to deter other legitimate forms of disagreement. These forms of disagreement are undergirded by counter-norms of oppositional or sub-groups, denying bases for wider and more just and equitable forms of intercommunication and associations between individuals — those not inclined to agree with a society dominated by business, technology, and science and its institutions.

In this regard, Mead did not further elaborate the meaning(s) of the “calling outs” of the other, nor the “glance of another’s eye,” or the “thousands and different attitudes . . . we assume toward the other . . . in his different modulations of the human voice (Mead, cited in Konvitz and Kennedy, 1961, p. 275). To Mead and to Dewey, then, the other that we realize in ourselves as normal and norm-like is acceptable only within the confines of a unified self and social reality.

While class, race, and national origin barriers may have been disdained by Dewey and Mead, their notion of a self as essentially unified and consistent is an ineffective concept today because it cannot explain the interacting that is occurring between multi-national corporations and Third World, inner city culture, labor, and institutions. In particular, Dewey and Mead’s notions of interactions and their relations to institutions and individuals’ deliberations do not account for the degree to which counter-claims are co-opted by the formation of a self that remains coherent despite contradictory or conflicting claims. Hence, Dewey and Mead’s coherent self ignores the very bases on which power and language intertwine themselves in and through essentialist terms of “class,” “race,” “national origins,” and further, “ethnicity,” “gender,” and new forms of international collective consciousness and struggles.

Returning to the Text

While the authors argued that the macro theorists of the struc-

A Critique of Dewey’s Notion of Democracy and Traditional Symbolic Interactionism from a Post-Structural Symbolic Interactive Perspective

tural-functional and social conflict paradigms tended to overlook an understanding of “society as a product of the everyday interactions of individuals,” the authors further posited that this paradigm — the symbolic interactive — “obscured larger social structures . . . overlooking the widespread effects of our culture” (p. 579). Examples are offered of a homeless man who can be seen symbolically by the individual meaning-maker as either a “bum looking for a handout” or as a “fellow human being in need.” The authors, however, do not go further in seeking to penetrate either macro or micro paradigms, leaving the reader in a mutually exclusive dilemma.

On one side, the reader is positioned to understand the text as seen from an individualistic or consistent self vantage point, already reviewed in the previous section, in which “tens of millions of people,” through their “ongoing experiences” of viewing the homeless, “construct” these experiential viewpoints as these people interact with one another from within established norms, merely “finding meaning[s]” relegated to “define[ing] . . . identities, rights, and obligations towards others” (p. 578), as defined by the dominant group norms. On the other side, from these constructions, the text reveals a subject-creator who acts on the world only to a point, only from an individual’s perspective based on an unified subjectivity housed within the individual, not the struggles of competing norms and sub-groups that make up the social whole. The text thereby creates a subject-creator, one who interacts with other individuals solely within prescribed, albeit flexible, individualistic and confining limits.⁵

Ironically, the authors of the text maintain a divide that they are trying to cross. They do not attempt to widen the symbolic interactive paradigm to include oppositional forces, such as a complex interplay and overlapping action among classist, racist, and sexist power struggles of various group memberships that cross over from the macro into the micro. Rather, they, like Dewey and Mead and their progressive contemporaries, limit constructing one’s role to the site of the individual as an unified subject, who, in social interactions, acts in “balance” and “harmony” with the “social whole.”

Thus, as Dewey maintains, one's "personal capacities which characterize a democracy" are "not the product of deliberation and conscious effort." (Dewey, 1916, 1944, p. 87). Rather, insists Dewey, "greater individualization" and "broader community of interests" necessary for the widening of "shared concerns" and the "liberation of personal capacities . . . can only come about first through reliance on modes of manufacturing or business, commerce, travel, migration, and intercommunication" (1916, 1944, p. 87, emphasis added).

All of these actions, however, focus on the role of the individual alone or isolated, rather than the role of the individual as a member of a subgroup, acting with other individuals, sometimes against the dominant group's norms, sometimes constructing their own norms. There is no discussion by the authors of the text (or by Dewey or Mead) as to what happens when such subgroup activity resists the dominant group norms to the extent that these norms are de-constructed, co-constructed, and re-constructed in collective action. Whatever the outrage spurring on this collective action or struggle, the authors ignore the role of the collective subject living within and struggling against the dominant group's norms when one is labeled "different," "weird," "disorderly," "crazy," or "deviant."

Thus, the impression given to the students by the text is that the subject in the symbolic interactive paradigm is nothing more than a reflection of the "individual in balance and interacting with the social whole." This diminutive role of the social actor mirrors, on the micro level, symbolic interactions of the individual confined within the boundaries of the macro and the larger structural functional paradigm, which is capitalism. The mirror reflection of the "macro" in the "micro" also excludes from consideration how conflict or the resistant role of the individual or group of individuals forming their own norms — perhaps resistant to capitalism — may play a part in re-conceptualizing what can go on "in between" the macro and the micro — perhaps theorizing a "third paradigm." Only in their concluding chapter do the authors insist that despite all the fluctuations of the economy and the misery of resulting social and economic dis-

locations, “capitalism will almost certainly be the predominant mode of economic organization . . . during the twenty-first century, and indeed, perhaps during the next” (p. 828).

The main assumption guiding the text, then, is grounded in a bias toward the continued domination of a structural-functional paradigm of social theorizing, reinforcing the social formation as capitalist, and warding off collective counteractions by workers. By taking this position, the authors discredit the social conflict paradigm as devoid of individual and collective activity.

Excluded from this paradigmatic arrangement is any component that describes how language use and interaction may position a member of society to take on roles that challenge the dominant norms. Such language use can construct meanings that cross into the norms, beliefs, and values of diverse subgroups. Some of these subgroups, however, are those that are hegemonized by the dominant group, making their members perform complicit acts, such as giving their consent against their best interests as defined by the subgroup norms. These complicit acts, in which the individual performs roles of the dominant group while being a member of a subgroup, may make the actor slide into norms that he or she misrecognizes to be derivative of the subgroup. The actor is given the impression that his symbolization, language use, or interacting is in harmony, not conflict, with the norms underpinning his subgroup. He or she feels a part of or belongs to the group he is speaking from and, apparently, “constructing.” This misrecognition also produces an impression that there are no limits placed on individual activity by the structural and social whole.⁶ The individual is foreclosed from a more critical understanding of how he or she, once crossed by the macro or the social whole, becomes positioned into acting in ways that may not be in his interests reflective of what constitutes a self.

Conclusion: Re-conceptualizing Discourse in the Core Course

The students’ talk in the core class often mirrored the two dominant paradigms offered in the text, the structural-functional and the

limited symbolic interactive. As we progressed, however, the students and I began to see how the two views occluded the struggles of the American people throughout history and sabotaged more crucial perspectives, including those of American workers, women, and African Americans.

Our discussion exposed the latent tensions underlying the admission of newcomers to the university community: immigrant and African American students who sat separately from the Italian, Jewish, and Irish American students or other middle to upper-middle-class students, most of whom commuted to school by means of car rather than public transportation.

Taking a position that would offer an alternate viewpoint, I decided to collaborate with the students in constructing a kind of post-structural, or wider, version of symbolic interaction to complement the textbook's understanding of Mead's work, as well as Dewey and the other progressives of American education as discussed in class, I sought to go beyond the three paradigms, using a post-structural orientation of conflict and counter-hegemonic theorizing. I attempted to show the students how complex these latter perspectives are, that through them oppositional forces of society cause power to cross into and integrate class, gender, race, poverty, welfare, nationalism, ability, and so on, in complex, overlapping, and shifting ways.

By going beyond the two dominant paradigms, and focusing on a new, re-constructed socially symbolic interactive paradigm, a kind of post-structural discourse system was constructed, as the students and I began to build our own communities of power, language, and self. As they adopted this new approach to the course lessons, their questions and class discussions exposed different levels of theorizing and living between the micro and the macro. Some of their theorizing put into critical context the purposes and functions of public schooling and publicly funded universities, as structurally and functionally defined. Policies relating to standardized testing, tracking, remedial training courses, and the dominant voices of our textbooks

were now linked, at different, shifting and aligning levels, to the larger forces of society through post-structural concepts in language, as “signifiers,” “chains,” and “discursive formations.” Thus, began our attempts to penetrate the macro and micro with the discovery of a third paradigm.

I need a school attribution. thanks, su

**Note: The following does not appear in the hard copy; are they
End Notes?**

1. The required text defines the three paradigms as: structural-functional, a complex system whose parts work together to promote solidarity and stability; social conflict, an area of inequality that generates conflict and change; and symbolic interaction, society as the product of the everyday interactions of individuals. To the text authors, “both the structural-functional and social conflict paradigms share a macro-level orientation, meaning a focus on broad social structures that characterize society as a whole The symbolic interaction paradigm takes another tack by providing a micro level orientation, meaning a focus on social interaction in specific situations” (p. 578). 2 To be discussed in more detail in an article to be published, entitled “Approaching the Third Paradigm for Social Science Theorizing: Penetrating and Bridging the Macro/Micro Divide — Reflections of Teaching a Core Course at City University.” 3 See, for example, the works of Homi Bhabha (1989, 1990), and his ethnographic followers, as Diane Dubose Brunner (1998), May Joseph May and Jennifer Natalya Fink (1999). In educational ethnography, see Fleischer (2000). 4 Pointing to the political dimension in which norms circulate as signifiers in words, deepening the work of such post-structuralists as Lacan, see Shuli Barzilai (1999), Bruce Fink (1995), and Yannis Stavrakakis (1999).
5. Although there is a discussion of social mobility and class conflict from a Marxian perspective, alluding to how the poor and homeless blame themselves for their plight (pp. 620-621), the authors of the text never pause to reflect critically on their own assumptions, nor those of Dewey and Mead concerning democracy, education, and construction of identities in institutionalized role attainments. They do not consider how their dichotomizing the macro and the micro obscures the extent to which the micro may be crossed into or invaded by macro forces or,

for that matter, how the micro may penetrate the macro by collective, grass-root, group action. Moreover, the authors give short shrift to how the oppressed may blame themselves for their predicament, rather than the social, economic, and political structures, or how they sometimes allow their selves, in language, to attack one another, each becoming the other's oppressor, thereby undermining any collective movement.

6. While unfamiliar with the concept of "hegemony," Dewey understood the historical development and relations between the state, institutional society, and public education, the latter serving as an ideological apparatus serving the interests of social efficiency while, at the same time, the development of human capacities. Despite his warning of how social efficiency could invade the social realm, Dewey was able to reconcile the two interests because of his insistence on the individual's attaining a mind that was "self-consistent." In this insistence, Dewey was able to justify both "disciplinary training" and practices that would "sift" for "what each individual was good for," while finding the "deeper" functions of education for developing "personal capacities" for a "democratic" form of education. Dewey expressed this form as an ideal by insisting that a "fuller, freer, and more fruitful association and intercourse of all human beings with one another," predicated on the installation of a "working disposition of mind," would bring about such a state (see p. 89, 90-98). At the same time, however, Dewey's self is able to reconcile the "sifting" of "what an individual is good for," while espousing a free, democratic and equal form of education, albeit individualistically and self-consistently defined.

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WHO ARE MY EDUCATION STUDENTS AND WHO ARE THEY TO BECOME AS FUTURE TEACHERS?: EDUCATIONAL FOUNDATIONS AND THE SOCIALIZATION OF PROSPECTIVE TEACHERS

David Granger

Introduction

When exploring a very broad topic in a very specific context, as I will be today, one is I think wise to focus his commentary on the significant traits of his own immediate environment, rather than venturing a full topographical map of the entire terrain. For others' paths through this same terrain will doubtless reveal a somewhat different set of attending features, of particular obstacles encountered and prospects for overcoming them. It is often the case, too, that these features change markedly with the passage of time. I am assuming that the complex terrain of teacher education policies, programs and practices is no exception.

The following paper was conceived and written with precisely this idea in mind. It poses, whether directly or indirectly, substantially more questions concerning the relationship between educational foundations and the socialization of prospective teachers than it ever intends to answer, much less resolve. Nor does the paper pretend to broach all of the questions that might be worth asking on the subject. I do, however, have in mind to try and identify here a few common traits of my current teacher education students, traits which, in tandem with those of recent trends in teacher education, should I believe concern those of us committed to the purposes of educational foundations. It is my hope that at least some of these traits will resonate with features of your own experience, and perhaps serve as both guideposts and a catalyst for further thought and discussion.

My Immediate Environment

This past fall semester, my first at SUNY Geneseo, proved to be at once eye-opening and a considerable challenge to my skills as a teacher. More than once I found myself reduced to a state of perplexity, not unlike a hiker who diligently ascends the sides of a tall mountain, marking every step along the way, only to find that the trail suddenly dissolves half way up. Surely all of us have been faced with situations in the classroom that seem to defy in some perplexing way our most careful planning and expectations. Maybe this is even more the norm than the exception. And yet there are times, though they are less frequent, when such ostensibly minor incidences seem to point to larger social and cultural matters; more specifically, for those of us who are teacher educators, to important questions about just who our students are and who they are to become as future teachers. Here is how all of this unfolded for me.

My chief responsibility at Geneseo involves teaching the well-established undergraduate course entitled “Social Foundations of American Education.” It is a course required of all students pursuing teacher certification. There were seventy or so students in my two sections this fall, most of them sophomores. Early on in the semester our main course text casually raised the familiar issue of “teaching to the test.” Sharing the authors’ expectations, I had supposed that my students would to a person quickly find this idea problematic, if not for various reasons inherently miseducative. I was wrong. Not only were several of them surprised to learn that teaching to the test is widely considered miseducative as well as ethically suspect by foundations people, they were also noticeably unnerved by it. For them, I eventually came to see, not teaching to the test in the educational milieu in which they had been socialized is almost as disconcerting as the absence of traditional letter grades had seemed to me when I was in school. Several students even felt it a teacher’s duty to teach to the test — namely, the high-stakes standardized achievement kind — and from where they sat, could supply very compelling arguments to that effect. Likewise, others earnestly wondered whether teaching

to the test might not actually be a necessity if teachers are to satisfy expanding accountability initiatives. This is when I first began seriously to ask, as William James would have it, “Who are my students and who are they to become as future teachers?”

There is I gather nothing remarkable or out of the ordinary about these questions; they would seem indispensable to the mind-set of any reflective practitioner. Still, they had appeared to me extremely pressing at the time. This is no doubt partly because I was teaching at my third very different academic institution in three years, and with three rather different cohorts of education students. My old habits and presumptions were understandably conflicting with my new environment.¹

And yet there was clearly more to it than that. I was also feeling an increasingly acute sense of my responsibilities as a foundations instructor — and a gnawing sense of the obstacles before me if I was to meet these responsibilities and help my students along the path to becoming reflective practitioners of teaching. Moreover, these only grew as the semester progressed. I soon noticed that provocative discussion questions easily became the vehicles of mere information exchanges, the class making sure that they had accurately recorded every last word that ostensibly received my stamp of approval. Small group work, where the students were to investigate topic areas amongst themselves while I moved around the room offering assistance, often produced anxieties redolent of Meno’s Paradox: “How can we be sure that we’re getting everything right?” “How do we know when we’ve got it all?” “We can’t find the answers to our topic in the textbook?” (The topics often required that the students draw inferences from the readings.) Or, perhaps most revealing, “I’m not comfortable having to depend on my other group members for what I’m supposed to be learning?” As much as I worked to disabuse the students of this Meno-like posture, I still somehow felt obliged to review methodically each topic area with the entire class before moving on to the next chapter.

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I did admittedly discover that the majority of Geneseo's education students are very amicable, highly conscientious and academically inclined; they know how to "play the game" and are willing to "follow the rules," is how I would put it. The reverse side of this, though, is that many are naturally reticent in the classroom, almost apolitical, suffer from intense grade and test anxiety, and are not comfortable taking any sort of risks with their course work.² Who, once again, are these students to become as future teachers? How compatible is the socialization which they have previously received, and that awaiting them in the next couple of years, with critical-creative democratic teaching? How can such teaching be achieved with dispositions and skills so acclimated to the "what" and "how" of education to the general neglect of the "why"? Is the current direction of teacher education policy and practice likely either to challenge or reinforce this orientation? And most importantly for present purposes, how can I best make sense of and address the popular yet parochial attitudes and "accepted meanings" (Dewey's term) as to what teaching and learning are about that so many students bring with them to my foundations class?

Dewey on the Constitution of the Self

John Dewey encourages us to envision the self as a continual work-in-progress. It is not to be thought of as a fixed Cartesian entity (subject), situated and constituted independently from its actions and ends, standing over and against the world (object). The self is better seen as an activity or constellation of behaviors, Dewey offers, a means of organizing and making sense of experience rather than a mental substance *which* acts. It is an ongoing event that emerges and, one hopes (it may deeply fragment or become encased in a shell of addled routine), expands or grows through interaction with the social and cultural word. Consequently, self-realization is no more guaranteed than any other of life's goods.

Dewey's take on this emergent self is a natural extension of his theory of habits, those waiting-to-be-expressed "working capacities"

of the individual (Dewey, 1922, MW 14: 21). Indeed, in Dewey's eyes we are truly creatures of habit; there is no pre- or asocial core self that is always (already) there, independent and autonomous. Habits for Dewey actively condition all that is apprehended through the senses, be it seeing and hearing or touching, tasting, and smelling. They govern our dispositions, desires and ends, as well as our abilities to care, perceive and think. This means that habits are a ubiquitous feature of everyday life and need not have the negative connotation often assumed today. They do incorporate such things as smoking and over-eating, yet also include patterns of linguistic behavior and problem-solving techniques. In short, habits are social functions and social phenomena. Their formation and composition cannot be reduced to the activities of individual persons, but are just as determined by the environment — an environment replete with social meaning and significance. "Habits incorporate an environment within themselves," Dewey wants us to understand. "They are adjustments *of* the environment, not merely *to* it" (Dewey, 1922, MW 14: 38). Thus habit is first and foremost an expression of culture rooted in the lived body.

Dewey then goes on to characterize habits as "arts." When intelligently developed and flexibly responsive, he suggests, they at once simplify and enhance our ability to act meaningfully with the environment. Habit as a "vital art" is a "kind of human activity which is influenced by prior activity and in that sense acquired; which contains within itself a certain ordering or systematization of minor elements of action; which is projective, dynamic in quality, ready for overt manifestation; and which is operative in some subdued subordinate form [e.g. predispositions] even when not obviously dominating activity" (Dewey, 1922, MW 14: 31).

Of course, as teachers know perhaps better than anyone, many of our habits unfortunately have neither the traits of artfulness nor of intelligence, though they constitute a formidable portion of our everyday dispositions and behaviors. We contract them haphazardly or by gradual assimilation in the process of socialization, often as a kind

of cultural inheritance from those who came before us. (Hence culture has us before we have it.) This inheritance is surely a necessary and in myriad instances beneficial resource for self-realization. But either way, Dewey tells us, the extent to which intelligence plays a direct role in the development of habits determines the degree to which they lend themselves to varied and elastic use. A beginning teacher, for example, learns how to deal with a variety of classroom contingencies by appealing to different patterns of response, such as those encountered in a classroom management course. These response patterns must however manifest habits admitting some degree of flexibility if she is not to become what Dewey calls “a wooden and perfunctory pedagogue” (Dewey, 1934, *LW 10*: 267).

Dewey therefore also recognizes that certain types of activities and environments tend to lead to the formation of fewer and more inflexible habits in ways that contract the self, while others help it to expand. This is because the self’s ability to act meaningfully depends upon acknowledging and establishing many and diverse connections with the environment. If the activities initiated or supported by the environment spawn habits which limit the self’s ability to make and expand these connections — as seems the case with some of the previous schooling experiences of my education students — it becomes incapable of responding intelligently to new conditions and circumstances. Intelligence gives way to bare routine and new situations are forced into the template of the old. But “the welfare of others, like our own,” Dewey says, “consists in a widening and deepening of the perceptions that give activity its meaning, in an educative growth” (Dewey, 1922, *MW 14*: 202).

The working capacities constituting our habits are nevertheless essentially provisional. In fact, since every situation we find ourselves in is somewhat unique, our habits are constantly undergoing minor adjustments without our really being aware of it (Dewey, 1922, *MW 14*: 30). And while it is often practicable (and admittedly tempting) to seek the shelter of habit when faced with uncertain environments, at other times it is either virtually or wholly impossible. Our continued existence inevitably throws us into situations which bar

crucial habits from their normal paths. These can result from changes both to the self and to the environment: eating habits begin to clash with decreasing body metabolism. Novel situations can also cause several preexisting habits to come into conflict with one another: a teacher is suddenly forced to reconcile her sense of responsibility towards her students with her allegiance to school policy and administration. When this occurs the habitual self calls for reconstruction through conscious, informed deliberation. Dewey refers to this process as involving “a dramatic rehearsal (in imagination) of various competing lines of action” (Dewey, 1922, *MW 14*: 132). Dramatic rehearsal gives us the opportunity to experiment safely, “by tentative rehearsals in thought,” with alternative possible ways of resolving blocked and conflicted habits (Dewey, 1922, *MW 14*: 133). When we choose and begin to act on one of these alternatives, we do not just change the environing conditions; we are on the path, for better or for worse, to a next self.

However Dewey also warns us that it would be a grave error to treat “the old, the habitual self...as if it were *the* self; as if new conditions and new demands were [inevitably] something foreign and hostile” (Dewey, 1932, *LW 7*: 307). For this relatively static, attained self of past experience functions best in conjunction with a transitional, dynamic self. Only then does its critical temporal dimension come adequately to light. Dewey writes:

The growing, enlarging, liberated self...goes forth to meet new demands and occasions, and readapts and remakes itself in the process. It welcomes untried situations. The necessity for choice between the interests of the old and of the forming, moving, self is recurrent. It is found at every stage of civilization and every period of life. (Ibid)

The self, in its amalgam of the static and dynamic, must of necessity relinquish its current make-up if it is to expand substantially its palette of meaning-enhancing ways of interacting with the environment. In other words, self-making is only an initial step along the

eventual path to self-remaking, entailing reciprocating activity within and beyond the habitual self. And as Dewey intimated above, this involves a disposition that can be mindfully, if not easily or effortlessly, pursued. In *Experience and Nature* he dubs it “cultivated naiveté” (Dewey, 1925, *LW 1*: 40). It is the disposition of the reflective practitioner — the liberated-liberating self.

Dewey explains cultivated naiveté this way:

We cannot permanently divest ourselves of the intellectual habits we take on and wear when we assimilate the culture of our own time and place. But intelligent furthering of culture demands that we take some of them off, that we inspect them critically to see what they are made of and what wearing them does to us. We cannot achieve recovery of primitive naiveté. But there is attainable a cultivated naiveté of eye, ear and thought, one that can be acquired only through the discipline of severe thought. (Ibid)

This, I would submit, is Dewey’s cultural hermeneutics: an interpretive dialectic between self and world that resists closure. Unlike a lot of contemporary critical theory, though, it is more a hermeneutics of replenishment than of suspicion. Cultivated naiveté is first and foremost a restorative activity, one expressly conceived to recover and critically renew our relations with the features of our experience. Dewey is looking to increase our sensitivity to interpretations of events other than those that might seem the most obvious or comfortable to make. Yet he clearly does not want us to mistake this for a passive or primitive posture either — it requires a rigorous act of “intellectual disrobing” (Ibid). Cultivated naiveté entails being open-minded not empty-minded, interested not indifferent, while investigating our intellectual habits through a receptivity and sense of responsibility to formerly neglected aspects of the experiential landscape. Here, then, lie the dispositional traits, knowledge and skills that I aspire to inculcate in my students and that underwrite my sense of purpose as a foundations instructor.

Current Trends in Teacher Education and the Fate of the Reflective Practitioner

In a recent book entitled *Creating Democratic Classrooms: The Struggle to Integrate Theory & Practice* (1996), Landon Beyer discerns the following about current trends in teacher education policy and practice. The disparity or even antagonism between Dewey's "cultivated naïveté" and what Beyer terms the continued "deskilling" of teachers is, I think, worthy of our concern:

[T]here is more than a little similarity between the normal school training of the last century and the practices of contemporary teacher education programs — including some proposals for their reform. Teacher education programs have become more field-based, partly through the mandates of state departments of education. Student teaching has become an apparently universal component of teacher preparation. And since some kind of classroom proficiency is a requirement for teachers, this is both understandable and appropriate. Increasingly, however, educational regulatory bodies are mandating extensive experience in schools as a prerequisite to student teaching. As a result of such mandates, teacher educators have created practica, classroom observation modules, and field-based courses or course components, and have encouraged student-mentor relationships involving public school teachers. The rationale for *these activities is often well-intentioned. Yet it seems likely that one outcome is the unreflective socialization of prospective teachers into the accepted norms, mores, and folkways of the profession as it is currently practiced.* (Beyer, 1996, p.6, my emphasis)

According to this conservative, functionalist orientation, one aimed at facilitating students' "fit" with the current realities of schooling, "teacher education is concerned with helping prospective teach-

ers acquire appropriate techniques and strategies, manage and monitor classroom interactions, ensure academic achievement (largely through test scores of one sort or another), and create activities that are socially desirable and developmentally appropriate” (Beyer, 1996, p.5). And the more intensive this functionalist orientation becomes, one would surmise, the more prominent and entrenched become those habits and beliefs about schooling that prospective teachers acquired during their previous education. And yet, I want to say, as Shakespeare’s Hamlet puts it, “there’s the rub.” For it would seem too that the less time education students spend practicing cultivated naiveté and examining alternatives to the current features of schooling, expanding their working sense of the possible meanings of teaching and learning, the more likely their future selves (as teachers) will be circumscribed by the past, their liberated-liberating selves constrained and constraining. Thus, for instance, my Geneseo students might well come to accept as a given (if they do not already) the realities of “teaching to the test,” official knowledge, social control and institutional efficiency, mandated objectives, and tooth-and-claw competition — all of which I believe go against the grain of critical-creative democratic teaching. In such an environment a lot, indeed, would apparently rest with the fate of educational foundations.

Regrettably, though, the irony that the increased professionalization of teaching could potentially disable the reflective practitioner is overlooked in many of the recent calls for teacher education reform. But this should not come as any great surprise. Ours has since its inception been a culture more amenable to the “doer” than the “thinker,” to the practitioner than the theorist. And our students come to class having been so acculturated (or habituated), despite Dewey’s constant reminders that this is ultimately an invidious distinction, and no matter who or what is at fault.³ Ours is also a culture which for several reasons has historically shown more than a little distrustful paternalism towards those who educate our children and, I would add, our teachers. As Beyer tells it, then, “[f]rom the normal school movement of the 19th century to the more contemporary concern for providing ‘survival skills’ to future teachers,

to the call for deinstitutionalization of teacher education in favor of a school-based apprenticeship system, programs that have fostered theoretical insight and inquiry have frequently been dismissed as lacking in useful knowledge or as too destabilizing” (Ibid). In other words, such programs provide teacher education students with too much of what they don’t need and too little of what they do need, as articulated by a group of “experts,” to function effectively in the classroom. As people working in foundations, we have all probably seen or experienced for ourselves the myopic instrumentalism embedded in these social conventions and ideological constructs. To what extent, I want to ask, is it to constitute our students’ future selves?

I have recently learned that educational foundations at SUNY Geneseo is not immune to these same conventions and constructs. Moreover, they also come at us from the other side, as it were — that of the privileging of theory over practice which typifies the Western liberal arts tradition. Here is a recent example.

As new state regulations and requirements have made our revised teacher education programs somewhat more concentrated and less flexible than in years past, several members of the college faculty have voiced concerns that, if these programs are approved, education students will no longer have the opportunity to obtain the well-roundedness of the “Geneseo experience.” Some of the proposed solutions to this perceived problem entail, among other space-saving measures, reducing “Social Foundations of American Education” to a two credit course, absorbing its content into other courses, or dropping it altogether. Ironically, but again not surprisingly, it has been suggested that students do not really need educational foundations to do their jobs effectively (given the current realities of schooling), that it does not (or could not) contribute significantly to students’ well-roundedness, and that it can always be “picked up” at the master’s level. I hope with Dewey’s help to have underscored the perhaps increasing danger that this kind of thinking poses to teacher education. As one of my students wrote in a paper a couple of months ago, “One of a teacher’s main goals in the classroom should be to get her

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students to be informed critical-thinkers. I see now how impossible this is if teachers never learn to do this themselves.”

Before offering a few concluding comments of my own, I would like to speak briefly about one of my recent efforts to overcome the obstacles to cultivating liberated-liberating selves which I experienced last fall.

The very first assignment that I gave my students spring semester was to write a three page “self-profile.” These profiles were to explore items such as the characteristic traits of the students’ home communities and schools, their social and academic experiences in school, their notions of the means and ends of schooling, and their beliefs concerning the degree to which their schools accomplished these ends. I then asked the students to refer to their self-profiles in writing a series of four response papers over the course of the term. They are able develop their paper topics individually from a dozen or so case studies discussed in class, most of which are directed to issues of diversity and equity. (I realized that they would likely select topics that they already had strong opinions about. But this is exactly what I wanted.) As a leading requirement, however, the students must in each paper use their self-profiles to reflect on why they chose their specific topics, how they think their past experiences might have influenced their responses to these topics, what this could mean for the kinds of teachers they might become, the imagined strengths and weaknesses of these projected future selves as critical-creative democratic teachers, and lastly, how any perceived weaknesses might be addressed through our class and over the next few years. Given what I have seen thus far, I am expecting that most of the students will have gotten the hang of this by the end of the semester.

In any event, I certainly cannot make any grand claims for this sort of exercise in cultivated naiveté. It obviously has significant limitations; not the least of which being the easy but false presumption that one can ever become fully and objectively present to oneself. Nonetheless, the exercise has I think given the students a way to

begin to come-to-know themselves in relation to their culture as I come-to-know them. And it has provided them a sympathetic space for situating inquiry into teaching within the context of at times discomforting self-criticism, unsettling the world as they now see and acknowledge it. Perhaps most importantly, however, they are beginning to understand that the path to personal and cultural renewal is a long, slow, and twisted one, with many stops and starts, and that growth necessarily involves loss in the form of old habits, beliefs, associations, projects, and customs.

Conclusion

As I stated at the outset, there are I believe no easy resolutions to the questions and concerns raised in this paper. And this is only complicated by the fact that the issues involved can both look and be very different from place to place and from time to time. My aim was thus simply to try and articulate my sense of purpose as a foundations instructor, and briefly to map and interpret some of the obstacles that I recently experienced in seeking to fulfill this purpose as a newcomer to SUNY Geneseo. And, again, I would hope that my efforts to negotiate these obstacles might offer a few welcomed guideposts for others working to scout a path through similar terrain.

Teacher education policies and programs that readily lure our students towards the comfortable and the commonsensical short-circuit opportunities for critical engagement. But “if we are to avoid such instrumentalism,” as Beyer writes, “teacher educators must provide opportunities for reflection on current school practice and the ends it serves, as well as support for articulating alternative practices that respect students’ integrity as moral beings and their abilities as social actors” (Beyer, 1996, p.15). The role of educational foundations in this is not I think to furnish prospective teachers with a fixed body of knowledge, concepts, or ideas, but to help them cultivate the requisite attitudes and attributes to negotiate their own way intelligently through the contingent realities of schooling. For the current reality, with the peremptory demands and expectations it places on students and teachers (and often in the name of “equality”), must

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inevitably influence who our students are and who they are to become as future teachers. This, whether we choose fully to acknowledge it or not.

I need a school attribution. thanks, su

Notes

1. The School of the Art Institute of Chicago (SAIC) is a modestly-sized, private fine arts school conferring, among other things, much-esteemed MFA degrees and also possessing well-respected teacher education programs. The education students, undergraduate and graduate, are by-and-large not strong academically, though on occasion fiercely (if somewhat facetiously) political and are quick to offer opinions on even the most controversial of issues. The University of Chicago, in contrast, is a relatively large, private research university with a marginally diverse student population. Its sole investment in teacher education consists (or did until recently) in a smallish but reputable MAT/MST program. The education students are basically comfortable with academic pursuits and likewise offer opinions freely on a myriad of topics. (I should add that both SAIC and Chicago students were in my experience unanimously critical of the idea of “teaching to the test.”) SUNY Geneseo, as many of you know, is a public liberal arts college with selected professional and graduate programs. It contains a sizeable contingent of teacher education students, most from white middle and upper-middle class families. The students pride themselves on having finished near the top of their high school classes and many received high scores on their SATs.
2. All of these observations have been echoed in conversations with several of my Geneseo colleagues, a couple of whom have been at the college for a number of years. In stark contrast with the traits observed above, the College Honors Program calls for students who “are willing to take risks and are not obsessed with their grade point averages.”
3. In a little-read essay entitled “The Relation of Theory to Practice in Education,” Dewey offers a powerful critique of teacher education programs based on an apprenticeship model and which countenance the separation of theory and practice (Dewey, 1904, MW 3).

End Notes

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NYSFEA Essay Contest

For the second time N.Y.S.F.E.A. has held its annual essay contest. This has been made possible through the good grace of the office of Dr. Linda Bemier, Dean of Education at SUNY Binghamton, who has provided funds for the awards. The three essays chosen by the N.Y.S.F.E.A. panel (Sue Books, Eduardo Duarte and Anthony Roda) were submitted by Sarah Dodge of Caledonia Mumford School, first place; Jenifer L. Brown, Lead Teacher of Pre-school Age Children at the Early childhood Research Center, SUNY Buffalo, second place; and Jennifer A. Stoutenburg of Jefferson Avenue Elementary School, Fairport, New York, third place. The essays were presented at the association's annual meeting held at SUNY Oswego (April 9-10, 1999). The following is the first place essay, "Philosophical Basis for the Use of Empirical Methods in Teaching Mathematics" by Sarah Dodge.

THE PHILOSOPHICAL BASIS FOR THE USE OF EMPIRICAL METHODS IN TEACHING MATHEMATICS

Sarah Dodge

The Philosophical Basis for the Use of Empirical Methods in Teaching Mathematics

Educators use many different methods in teaching mathemat-

ics. Many rely on the lecture method and the extensive use of practice in using abstract algorithms to reinforce espoused theory. Others include more empirical methods, including the use of hands-on and discovery activities, in order to discern the mathematical ideas in the world around us. From this, the question arises of how it is that we are justified in using empirical methods in the teaching of mathematics when mathematics is essentially abstract and consists of eternal truths and ultimate forms?

Opposing Philosophical Views in Mathematics Education

Rationalism

The rationalist philosopher believes that ideas are the only true reality and that knowledge is discovered, not created. Plato (427-347 BC), one of the most influential of the rationalist philosophers, believed that the mind is superior to the body (Ediger, 1996). Plato believed that one finds perfection and eternal, unchanging truth in the Forms (Ediger, 1996). The Forms are separate from mind and body and exist independently from human existence, but can be discovered by the human mind through reasoning and dialectic inquiry (Ediger, 1996). The aim of education, for the rationalist, is this discovery of eternal, unchanging truths.

Plato believed that in the Forms, a perfect something exists, such as number systems and geometrical figures (Ediger, 1996). Mathematics is neither physical nor mental. Mathematics is independent of our wishes. (Hersh, 1997) According to Plato and his theory of the divided line, mathematics is part of the intelligible realm of being rather than the visible world of becoming (Jowett, 1998).

Such credence in the nature of mathematics implies the use of an idea centered mathematics curriculum. Students would need to think critically, synthesize content, and appraise the abstractions that would be acquired. They would discover, for example, that twelve times ten equals one hundred twenty in base ten regardless of human awareness of this fact. (Ediger, 1996) Students would see that par-

ticular, concrete instances in our world secure some of the abstract ideas that are discovered (Ediger, 1996). It is in this sense that the rationalist would find any value in experience. Concrete learning opportunities would be used only to assist and guide learners to understand the abstract, real part of mathematics (Ediger, 1996).

The discovery of mathematical ideas not found to exist in a concrete manner in our world suggests that mathematics is the logically connected study of abstract systems (Tymoczko, 1998) and further supports this type of curriculum. To the rationalist, mathematics is only empirical in that we discover it, external to ourselves (Hersh, 1997).

Empiricism

The empirical philosopher believes that all ideas originate in sense experience and that knowledge has a universal character that only comes to humans through sensory experience (Ediger, 1996). Ideas are created from experience. John Locke (1632-1704) distrusted abstract ideas. Locke states, "Let us suppose the mind to be, as we say, white paper, void of all characters, without any ideas: -How comes it to be furnished? Whence comes it by that vast store which the busy and boundless fancy of man has painted on it with an almost endless variety? Whence has it all the materials of reason and knowledge? To this I answer, in one word, from experience" (Fraser, from Locke, 1959, 121-122). Locke linked mathematical truths to moral truths. He believed that both of these seemingly abstract conceptions are simply idealized from the experiences of people (Hersh, 1997).

The metaphysics and epistemology of the empiricist supports the use of empirical methods in the creation of knowledge. Real world situations, measurable objectives, the gathering of data, precision, and exactness would all be a part of the mathematics curriculum. (Ediger, 1996).

The beliefs of some mathematicians, such as Hilary Putnam, that math is a human creation based on the physical world supports

this type of curriculum. To the empiricist, abstract mathematical ideas are derived from physical possibility. (Tymoczko, 1998)

Constructivism

The Constructivist believes that truth is made, not discovered. Constructivists believe that one makes and remakes reality. The goal of education in Constructivism is the growth of active learners through the construction and reorganization of cognitive structures. This goal, also, extracts the social aspects involved in learning. (Wheatley, 1991)

Constructivism draws heavily on Piaget's work. Jean Piaget (1896-1980) preferred to be referred to as a genetic epistemologist. His theories emphasized thought process and the continuous interaction between the child and the world around him/her as being essential to cognitive development. (Duffy, 1996) Piaget believed that seeking a balance between cognitive structures and environmental demands is what drives changes in cognition.

One of Jean Piaget's greatest contributions to educational theory was his developmental stage theory. This theory was based on Piaget's idea that there is an innate biological maturation in which learners develop cognitive structures to explain and order life experiences (Piaget, 1967). According to Piaget, the development of the learner occurs in four stages, although there is no guarantee that everyone will complete all four stages. The first stage is the sensorimotor stage in infants. At this stage, knowledge is gained solely from sensory experience. The stage of preoperational thought occurs roughly between the ages of two and seven. At this stage, children begin to use symbolic representation and know that objects exist even when not experienced, although judgments are still based on appearance rather than logic. The third stage of operational thought begins around eight years of age. Thought becomes increasingly more logical and comprehension of reversible action begins. By age twelve, formal operational thought has settled in. Children are now able to apply logical thinking to theory. (Duffy, 1996)

Based on Piaget's theory, Constructivists believe that what is expected from students should be developmentally appropriate. Piaget proposed that the concepts of counting and of the natural numbers are acquired through physical activity (Hersh, 1997). Piaget believed that active participation, the active process of discovery learning, a hands-on approach in math for those who have not attained the fourth stage, yet, and interaction between the teacher and the student should all be methods used in the learning process (Duffy, 1996). For the Constructivist, the students should construct his/her own mathematical knowledge and understanding through such methods as group work, social discussion, and hands-on experiences (Watson, 1995 and Wheatley, 1991).

Pragmatism

The Pragmatist philosophy encourages the use of processes that work best to help achieve desirable ends. Pragmatists believe that there are not universals or absolute truths. They believe that true knowledge is tested in experience. (Ediger, 1996).

John Dewey (1859-1952) was an important proponent of Pragmatism. Dewey believed that every study has a form and a content side of which the form is abstract in nature and the content is concrete. He believed that the abstract should be taught with reference to its use in social life. With reference to mathematics, Dewey felt that, at the introductory stage, the concept should relate to real ends and values then, eventually, the method may become a study of its own. He believed that mathematics should not be treated as an end in itself, but as a means for accomplishing an end. (Archambault, 1974)

Pragmatists believe in using educational methods that are social and child-centered where the child learns through experience and the focus is on what works best for the individual. Curriculum should focus on practical solutions to practical problems involving hypotheses, testing in life like situations, forming conclusions, and solving problems in current society. (Ediger, 1996) Learning should be active (Archambault, 1974).

Humanism

Many twentieth century philosophies focus on humanity and its relation to the nature of reality and the attainment of knowledge. Humanism is, in this way, related to Pragmatism and its offshoots, Reconstructionism and Existentialism. Humanists believe that one must consider that reality is not only internal or external in order to understand where mathematics fits in (Brockman and Hersh, 1998). Mathematics is neither physical nor mental, but social, which makes it both internal and external (Brockman and Hersh, 1998). Humanists believe that mathematics is a human activity and a human creation. It fits into the universal part of human culture. (Hersh, 1997 and Brockman and Hersh, 1998) Mathematics is internal to humanity as a whole and external to the individual (Brockman and Hersh, 1998).

Since mathematics is both physical and mental, it can only be studied in social-cultural- historic terms (Hersh, 1997). Mathematics consists of socially held concepts, thus, interaction and communication are an essential part of mathematics education (Brockman and Hersh, 1998). Empirical evidence and numerical experimentation are necessary in the decision of what to believe in mathematics and what may be mistakes in need of correction (Hersh, 1997). Pedagogical method would stress problem solving and other real experiences that are important to the individual student. The personal needs of each learner would be met. (Ediger, 1996) Each person involved would be both a learner and a teacher. One of the most important outcomes would be that the student learns, through social interaction, that mathematics is both discovered and created. Reuben Hersh gives the example that "Counting numbers are discovered. Pure numbers were invented." (Hersh, 1997, 75) Students would realize the transformation of the potential to the actual.

Kant's Attempted Unification

In summary, so far, the philosophies of rationalism, empiricism, Constructivism, Pragmatism, and Humanism support some type of empirical method used in the teaching of mathematics, although for

different reasons. The discrepancies between these philosophies are unsettling and unsatisfactory in our search for the justification of the use of empirical methods in mathematics education. A comprehensive philosophy unifying the major divergences may provide a more convincing, stronger justification for these methods. Immanuel Kant (1724-1804) sought to unite rationalism and empiricism (Morse, 1998). Kant believed that reason and experience both contribute to knowledge. He thought that concepts without perceptions are empty and perceptions without concepts are blind (Kant's *Metaphysics*, 1998). Thought processes organize the data from experience and data from experience gives new insights.

Kant describes analytic a priori ideas and synthetic a posteriori ideas. Ideas that follow a logical thought process are analytic. Ideas that use empirical investigation for confirmation are synthetic. A priori knowledge is constructed by the mind. A posteriori knowledge is the result of experience. Kant states that common knowledge and scientific knowledge are a posteriori because this knowledge comes from the material world. Mathematical knowledge is a priori because it is independent of the material world and timeless. Kant further makes the distinction between analytic a priori, which is knowledge by analytic analysis, and synthetic a priori, which is not knowledge by logical truisms, but comes from the intuitions. (Hersh, 1997)

In *Prolegomena to Any Future Metaphysics*, Kant states that synthetic a priori statements are only permissible in mathematics (The Internet Encyclopedia of Philosophy, 1997). To Kant, pure mathematics is synthetic a priori (Hersh, 1997 and McFarlane, 1995). This belief is established on the basis of the universal human intuitions. Kant believes that the only innate knowledge that humans are born with are the intuitions of space and time. Kant states that arithmetic is the systematization of the intuition of time and that the intuition of space is systematized in geometry and that these are true for everyone, independent of experience (Hersh, 1997). It would follow that the validity of mathematical knowledge rests on the fact that it is based on the a priori forms of our sensibility that condition the possi-

bility of experience (McFarlane, 1995 and Tymoczko, 1998). Based on such beliefs, abstract and empirical methods would be used together in the teaching of mathematics. Empirical methods would be used to model the abstract concepts, but also to lead to the development of new abstract inquiry. (Hersh, 1997) The form of mathematics is given to us a priori, but the content is given to us in sensation (McFarlane, 1995).

The difficulty with Kant's philosophy lies in the fact that Euclidean geometry was the only geometry that was well established at that time (Hersh, 1997 and McFarlane, 1995). Many mathematicians find this to be a source of weakness in Kant's theories. They argue that Euclidean geometry can not be completely predetermined by our pure intuition of space alone because of the discovery of Non-Euclidean geometries (Hersh, 1997 and McFarlane, 1995). While Euclidean geometry explains the visual world around us, Non-Euclidean geometry is a better model for space beyond Earth, about which little was known in Kant's time. The two geometries are at odds because Euclidean geometry assumes the postulate that every line has exactly one parallel line through a particular point not on the original line and the Non-Euclidean geometries, such as Hyperbolic and Elliptic, assume that there are more than one parallel lines through a point or no parallels at all. The mathematicians argue that since these geometries can not coexist, it is impossible to have an intuition of space that implies geometry (Hersh, 1997).

Other mathematicians argue that the intuitive character of mathematics means that it is limited to objects that can be constructed and that intuition limits the broader region of mathematical existence. They claim that Kant knew that other geometries may be possible, but that they cannot be constructed as an image or picture even if physical existence is achieved. These mathematicians claim that Kant used Euclidean geometry because it was not a problematic premise in a social sense. They support this belief with Kant's statement that the ground for the three-fold dimension of space is unknown and arbitrary and is not logically necessary. To them, Euclid's

geometrical system is a transcendental abstraction from actual experience and the physical world does not necessarily conform to the way we must view it. In light of this perspective, the question arises as to whether or not some other geometry, though not picturable to our sensibility, might conform more closely to the way objects are actually structured in empirical space. (Kant on Euclid, 1998)

Whitehead's Solution

Alfred North Whitehead (1861-1947) sought to reconcile some of the aspects of rationalism and empiricism. Process is central to Whitehead's philosophy because he believed that reality is process (Stanford Encyclopedia of Philosophy, 1997). One encounters in this process occasions, which are objects, prehensions, which are the relational processes between the person and the objects experienced, and nexus, which is the extended time sequence when occasions and prehensions coalesce in ongoing existence (Whitehead, 1929). Whitehead believed that all objects should be understood as fields having both temporal and spatial extensions and that each object can be understood as a series of events and processes (Stanford Encyclopedia of Philosophy, 1997). Whitehead did not believe in the separation of the mind into a realm of its own. He thought that mental activity had to be viewed in the context of experience. But, Whitehead also believed that "The understanding of actuality requires reference to ideality." (Whitehead, 1953, 158). The empirical and the abstract are interdependent. What Whitehead refers to as eternal objects, similar to forms and universals, are abstract in that they are comprehensible without reference to a particular occasion of experience (Whitehead, 1953). Yet, a particular individual eternal object is connected to actual empirical occasions of objects, has a general relationship to other eternal objects, and still has a general character of its own because of the realm of possibility (Whitehead, 1953). In this way, what is real is both mental and physical and the acquisition of knowledge requires both the abstract and the empirical.

Whitehead thought that the important things to be learned are

ideas and that these ideas should be useful and connected with the experiences of the students. He believed that one learns best from the material world in which one lives. Whitehead cautions against the teaching of inert ideas that are received into the mind without being tested and used. (Whitehead, 1949) He states that inert ideas are useless and harmful and suggests that, to guard against the resulting “mental dryrot”, students should not be taught too many subjects and that what is taught should be taught thoroughly (Whitehead, 1949, 2). Too many small parts of a large number of subjects results in the passive reception of disconnected ideas, and passivity and inertness are a hazard in education (Whitehead, 1949).

Whitehead thought that the child should enjoy the experience of discovery. The knowledge that the child gains should be applicable to actual life in the present and the child should feel that he/she owns the knowledge. Education needs to be useful. Ideas should relate to the students’ sense perceptions, feelings, hopes, desires, and mental activities, adjusting thought to thought. Whitehead believed that there should be interdisciplinary connections between subjects because there is only one true subject matter and that is Life. (Whitehead, 1949)

Whitehead held that it is important to study the applications of a theoretical subject and that theoretical exposition should be short, strict, and rigid. He believed that the essential part of an idea is proving its truth either by experiment or logic. Students need to appreciate the importance of ideas and Whitehead believed that an idea is best appreciated through its use. Although, the use of an idea should not just include neat little experiments to demonstrate or prove isolated propositions. The use of interrelated truths is important. He, also, believed that one way of learning will not suit all learners and that specialization is needed at the more advanced stages according to students’ interests. (Whitehead, 1949)

Whitehead believed that education is the acquisition of the art of the utilization of knowledge and stated, “What education has to

impart is an intimate sense for the structure of ideas, together with a particular body of knowledge which has peculiar reference to the life of the being possessing it.” (Whitehead, 1949, 23).

Whitehead believes that pure mathematics is a realm of complete and absolute abstraction. He believes that mathematical ideas are discovered. (Whitehead, 1953) Yet, Whitehead believes that the science of mathematics is concerned with the investigations of patterns of connectedness, which not only applies to the abstract, but, also, the empirical (Whitehead, 1955). But, there are mathematical science connections between things that are extremely unobvious and we must depend on some prior, more abstract, mathematical knowledge to further our mathematical knowledge because our notions have progressed much further than those derived by sense perception (Whitehead, 1953). Once again, though, we return to the empirical nature of mathematics and the importance of the analysis of concrete fact because, as theory becomes more complex through the ages, new applications arise (Whitehead, 1953). Whitehead states, “The generality of mathematics is the most complete generality consistent with the community of occasions which constitute our metaphysical situation.” (Whitehead, 1953, 25).

Based on his beliefs about the nature of mathematics, Whitehead thinks that educators need to strengthen habits of concrete appreciation of individual facts in their interplay within mathematics and between mathematics and the rest of the world (Whitehead, 1953). Whitehead thinks that the reason that mathematics is a delight, but, also, an obstruction in education is “...the boundless wealth of deductions from the interplay of general theorems, their complication, their apparent remoteness from the ideas from which the argument started, the variety of methods, and their purely abstract character which brings, as its gift, eternal truth.” (Whitehead, 1949, 84). He believes that, in education, mathematics must be subjected to selection and adaptation, dealing directly and simply with a few general ideas of far reaching importance. Educators should eliminate the abstrusity of mathematics and focus on the relations of numbers, the

relations of quantities, the relations of space, and the interconnectedness of these ideas. (Whitehead, 1949) The material taught must be relevant to modern thought. The student should acquire familiarity with abstract thought and realize how it applies to concrete circumstances. The degree of abstraction and concreteness should be age appropriate, according to the stages mentioned previously. Students need numerous examples, both abstract and concrete.

Whitehead believes that the use of both induction and deduction are necessary. (Whitehead, 1953) He states, "There is a tradition of opposition between adherents of induction and of deduction. In my view it would be just as sensible for the two ends of a worm to quarrel." (Quotations by Alfred Whitehead, 1998). Whitehead believes that, initially, one should go from abstract and concrete particulars to general ideas, avoiding the pointless accumulation of details, so that the details illustrate the main ideas. Once the general is grasped, it can be applied to more particulars. (Whitehead, 1953) Whitehead states that bookwork is good if used properly, but the best method "...should satisfy the itch of youth to be doing something." (Whitehead, 1953, 198).

Alfred North Whitehead's general philosophy, view of the aims of education, and beliefs about the nature of mathematics and mathematics education based on philosophy overwhelmingly support the use of both abstract methods and empirical methods in the teaching of mathematics.

Applications of Whitehead's Philosophy

The impact of Whitehead's philosophy is apparent in applications in education.

The Illinois Mathematics and Science Academy is applying Whitehead's idea "...to eradicate the fatal disconnection of subjects which kills the vitality of our modern curriculum. There is only one subject-matter for education, and that is Life in all its manifestations."

(Eggebrecht, et. al., 1996, 4). The academy is reconstructing Whitehead's "one subject matter" by creating an Integrated Science program which reconnects biology, chemistry, earth and space sciences, physics, and the mathematics involved in each. Each student engages in interconnected experiences in response to his/her own inquiry as opposed to a static textbook interpretation of what should be learned. This learner-centered method of engaging students in multiple contexts enhances the transfer of knowledge from the familiar to new situations, which is an important life skill. (Eggebrecht, et. al. 1996)

Research shows that activity-oriented discovery in mathematics, an empirical method promoted by Whitehead, which involves collecting data or making observations, searching for patterns, and formulating conjectures, is very important in problem solving. Analyzing the data collected and connecting that to the prior knowledge of the individual results in theoretical conjectures created by the individual. (Kazuhiko, 1997) The analysis of concrete leads to a better understanding of the abstract. One two-year study found that student confidence, interest, and ability in solving algebraic equations were high when using hands-on methods, such as working with manipulatives (Leinenbach, 1996).

The National Council of Teachers of Mathematics, also, advocate the use of many of the same methods that Whitehead encouraged. The Council calls for teachers to consider what they know about their students and students' interests when choosing methods (NCTM, 1991). They encourage teachers of mathematics to use technology and concrete materials to explore mathematical ideas (NCTM, 1991), such as manipulatives (NCTM, 1989). The Council holds that mathematics is connected with other fields (NCTM, 1991) and connections should be made between mathematical concepts themselves and life circumstances (NCTM, 1989). Educators should apply mathematics to life problems and settings that are relevant to the students (NCTM, 1989). The Council, also, encourages group work where students can ask questions, discuss ideas, learn to listen to others,

learn to learn from mistakes, and summarize discoveries (NCTM, 1989).

Conclusion

Based on our consideration of the philosophies of rationalism, empiricism, Constructivism, Pragmatism, Humanism and the unification of ideas in the philosophies of Immanuel Kant and Alfred North Whitehead, it is clear that empirical methods have a place in mathematics education. I believe that Whitehead's interpretation provides the strongest justification of the use of empirical methods and the most comprehensive explanation of the interconnectedness of empirical methods with relation to other methods. Mathematics is neither physical nor mental, but has both physical and mental manifestations. The learner can discover true ideas through thought and experience, but, also, can create a personalized form of knowledge. The abstract study of mathematics is necessary, but it must build upon the concrete so that the learner can appreciate mathematics for its usefulness and, eventually, for its beauty. A child-centered, social, interdisciplinary approach to mathematics using empirical methods and abstract processes, as promoted by Whitehead, will help students develop into confident, fulfilled individuals and life long learners.

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End Notes

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NOTES AND COMMENTS

**EDUCATION AND THE ENVIRONMENT:
EXPERIENCE, DEPENDENT ORIGINATION, AND
RELATIONAL IDENTITY****Douglas W. Shrader**

In his article, "Causal Efficacy and Concrete Experience," John P. Azelvandre invites us to consider environmental education as a "process dealing, at its core, with discovering and fostering fruitful relationships between human learners and the wider world of which they are a part."¹ The invitation may appear at first to be a fairly innocuous description of an area that many educators, unfortunately, regard either as (a) a specialized study beyond their reach and/or (b) a nonessential set of studies safely relegated to the margins of "we'll get to that if time permits." If I read Azelvandre correctly however, the recommended approach to environmental education gives rise to a series of questions and observations that spawn, in turn, an unflattering critique of contemporary educational practice as well as a non-trivial set of prescriptions for both education and life. It is thus an essay that merits serious attention by a wider range of scholars than may have initially been attracted to the piece on the basis of its title or subject matter.

This brief review article is intended to illuminate, reinforce, and underscore both the substance and seriousness of Azelvandre's concerns. I also hope to provide additional context for conceptualizing those concerns as well as suggestions for an alternative framework of thinking about ourselves and our relationships (to others as well as "the world"). Particular attention will be given to parallels between Azelvandre's concerns and those of John Dewey.

To provide an ontological and epistemological framework for

his account, Azelvandre appeals to Alfred North Whitehead's Philosophy of Organism (a.k.a. "Process Philosophy). Of particular importance are the following concepts and ideas:

- 1) **Ontology:** the world is not composed of static, unchanging things. We do better to think in terms of events, processes, and happenings. Infinitesimally brief, idealized events are termed actual occasions. As Azelvandre explains, "The world is composed of occasions constantly emerging then perishing, thus forming the foundations for a new crop of occasions. Actuality is a process of constant change, not necessarily of form, but always, in a sense, of matter."²

- 2) **Epistemology:** there are two pure modes of perception. What we generally think of as conscious perception is termed presentational immediacy. Presentational immediacy is attention grabbing, but superficial and intermittent. Without causal efficacy, a basic but typically unconscious (or preconscious) sense of "causal connection of ourselves to the antecedent occasions of our bodies and our surrounding environment,"³ even the most basic experiences we associate with day-to-day living would be impossible. Azelvandre explicates the need for common ground between the two modes of perception as follows: "When I observe something, say for example a species of plant, I share with this plant a causal past. It is this shared causal past, responsible both for my eyes and the plant's leaves, which makes it possible for me to have the visual perception in the mode of presentational immediacy of the color green."⁴ The point is not simply that we need both modes of perception, or even that we need a proper balance or proportion between the two, but rather that any genuine opportunity for learning requires a dynamic interplay between presentational immediacy and causal efficacy.

In a fairly obvious and direct sense, my understanding of the world depends on my relationship with it. Only slightly less obvious

is the corollary that my relationship with the world depends on my understanding of it. Azelvandre's premise that environmental education deals with discovering and fostering fruitful relationships with the world positions those studies in a place of ontological, epistemological, ethical, and pedagogic importance. If the suggestion that environmental education may point the way toward a new mode of being and/or understanding seems somehow strained or implausible, consider John Dewey's 1909 lecture series at Columbia University.

Speaking within a context he describes as "the twilight of intellectual transition,"⁵ Dewey provides a cogent assessment as well as a probing set of predictions concerning the consequences of the Darwinian revolution. "Few words in our language," he observes, "foreshorten intellectual history as much as does the word species."⁶ In fact, Dewey begins his presentation by noting that the simple combination of the words origin and species "embodied an intellectual revolt and introduced a new intellectual temper."⁷ For millennia, Western philosophers and scientists had constructed systems of understanding based on the idea that experience is best explained by reference to a set of supposedly fixed and immutable forms. To take Darwin seriously would require rethinking the character as well as the role of experience in philosophy, science, and education. It would mean giving less credence, less centrality, and less prominence to concepts and ideas. In short, it would require a commitment to an uncertain and forever ongoing process of evaluation and reconceptualization of our most hallowed concepts of self as well as those concerning the world with which we interact.

Illuminated through these lenses, Dewey's writings take on an interesting set of hues. Much of his work can be seen as an extended inquiry into the consequences of this "new" Darwinian way of thinking. Of special importance are:

- (1) his uncompromising insistence on the central role that experience plays in the process of thinking,
- (2) his plea for a mode of understanding that emphasizes ac-

tivities, relations, and connections (versus unchanging forms, static things, and established facts),

- (3) his mistrust of rote learning, words, and concepts, and
- (4) his characterization of education as a process of growth and development, the success of which is gauged in terms of whether it leads to new opportunities for growth and development.

Consider first the role that experience plays in the process of thinking. In *Democracy and Education*, a landmark book still used in many *Foundations of Education* courses, Dewey writes:

The nature of experience can be understood only by noting that it includes an active and a passive element peculiarly combined. On the active hand, experience is *trying*—a meaning which is made explicit in the connected term ‘experiment.’ On the passive, it is *undergoing*. When we experience something we act upon it, we do something with it; then we suffer or undergo the consequences. We do something to the thing and then it does something to us in return.⁸

The value of experience, he explains, is found in the connection between trying and undergoing. Learning is transformative; it occurs “when the change made by action is reflected back into a change made in us.”⁹ Thus even when approached on its own, independent of any social or ethical agenda, there is something fundamentally wrong with thinking that is not “connected with increase of efficiency in action, and with learning more about ourselves and the world in which we live.”¹⁰ This leads to Dewey’s definition of thinking as “the accurate and deliberate instituting of connections between what is done and its consequences.”¹¹

Having set forth his account of experience and cognition, Dewey cautions against the pedagogic mind/body dualism that permeates

the educational system, now even as it did then. Three consequences of the dualism merit specific mention. First, it treats bodily activity as an unwelcome intruder into the educational process (generating “discipline” problems and an inordinate measure of nervous strain and fatigue for both teacher and student).¹² Second, it transforms senses and muscles from “organic participants” in instructive experience into “internal and external outlets of the mind.”¹³ Finally, it “throws emphasis on *things* at the expense of *relations*.”¹⁴

Ninety-five years after the publication of *Democracy and Education*, Dewey’s criticisms remain disturbingly current. Much of Azelvandre’s critique is rooted in the observation that contemporary educational practice is predicated on an excessively sharp distinction between *presentational immediacy* and *causal efficacy*, privileging the former over the latter. The unnatural disjunction between the two creates a very real danger of “getting stuck in habits of the mind which constrain our perception of causal efficacy and thereby distort our interpretation of presentational immediacy.”¹⁵ The remedy for this condition, quite naturally, is to “get out and see the world around us.”¹⁶ Azelvandre thus calls for a renewed emphasis on concrete experience. This, he notes, amounts to “a recurrence to causal efficacy: a directing of the light of presentational immediacy onto the fact of the community of causal interrelatedness; a widening of perspective to include this ground of understanding, this ontological knowing.”¹⁷

As evidenced in the preceding quotation, the experiential approach to cognition leads naturally to an emphasis on activities, relations, and connections. Thus Azelvandre writes of uprootedness and the importance of establishing a sense of ontic as well as moral community. In like manner, Dewey complains that perceptions and ideas are frequently treated as though they can meaningfully be separated from a myriad of relations, including but not limited to causal connections. On the contrary, he maintains,

...every perception and every idea is a sense of the bearings, use, and cause, of a thing. We do not really know a

chair or have an idea of it by inventorying and enumerating its various isolated qualities, but only by bringing those qualities into connection with something else... A wagon is not perceived when all its parts are summed up; it is the characteristic connection of the parts which makes it a wagon. And these connections are not those of mere physical juxtaposition; they involve connection with the animals that draw it, the things that are carried on it, and so on.¹⁸

Both Azelvandre and Dewey criticize the dominant educational model for putting too much emphasis on rote learning, words, and concepts. Part of the problem is the seemingly simple one of detachment and isolation. Azelvandre explains,

Books present symbols ... which represent a bird, a plant, a community. But books only very distantly and faintly tell the causal story of the trees from which they are formed. A student in a classroom, under artificial light, with books in front of her, is effectively cut off from and uprooted from the object of study (unless the object of study be classrooms, lightbulbs and books!)¹⁹

Before dismissing Azelvandre's concern as impractical or overly romantic, consider the consequences of an excessive preoccupation with concepts and symbols. As Dewey observes, the risk of intellectual decay is substantial, almost guaranteed:

We get so thoroughly used to a kind of pseudo-idea, a half perception, that we are not aware how half-dead our mental action is, and much keener and more extensive our observations and ideas would be if we formed them under conditions of a vital experience which required us to use judgment: to hunt for the connections of the thing dealt with.²⁰

Azelvandre's warning is no less grave:

...without the refreshing influence of felt causal connection, concepts become stale and limiting. We are apt to spin out a web of meaning going from concept to image to concept, always going farther out on a limb away from any sense of connection with one's surroundings. A sort of mental isolation sets in. Taken to pathological extremes such isolation leads to psychosis and death.²¹

The situation is discouraging but not hopeless. Azelvandre seems confident that if we make more room in the educational process for direct experience, "and if at the same time we can relinquish our hold on concepts, get out of our mental ruts and set ways, we can be open for fresh insight into our own self-constitution."²² Opening ourselves to new possibilities for growth and development is characteristic of what Dewey calls an active habit. "Active habits," he writes, "involve thought, invention, and initiative in applying capacities to new aims. They are opposed to routine which marks an arrest of life."²³ In this vein, Dewey defines education as "the enterprise of supplying the conditions which insure growth, or adequacy of life, irrespective of age."²⁴ He concludes, "Since growth is the characteristic of life, education is all one with growing; it has no end beyond itself."²⁵

How then do we go about cultivating active habits and relinquishing our hold on outdated concepts that limit us as well as our interactions with others and the world in which we live? Part of the answer, assuredly, is the advice given by both Dewey and Azelvandre: create more space for concrete experience, treat learning as an active process that promotes integration of learners and their environment (vs. detachment), and pay more attention to connections and relationships. In the process, we must rethink our concepts of both self and world. While this short review note does not provide a sufficient forum to pursue the matter in any great detail, we may do well to compare the dominant Western concepts of self and world with ones from other philosophical traditions. Three concepts that have been particularly useful in my own experience are those of relational identity, *anatta*, and co-dependent origination.

Though not exclusively a Confucian notion, it is nonetheless the Confucians who have most clearly articulated and defended the concept of relational identity. At root it is a fairly simple, even commonsense notion. Although I may appear to have independent existence, my identity derives (at least in large measure) from my *relationships*. *In a very real nontrivial sense, I am my relationships*. Without a wife, I am not a husband. Without children, I am not a parent. Without students, I am not a teacher. If I wish to understand myself, I must look for a better understanding of my relationships. If I wish to improve myself, I must look for ways to improve my relationships.

The concepts of *anatta* (no self) and co-dependent origination (*pratitya-samutpada*) are Buddhist in origin. Though explications and commentaries concerning these concepts have often become amazingly complex and mind-boggling,²⁶ the basic ideas are reasonably simple. First, *anatta*: I am not an independently existing, eternal, unchanging essence. If the self is conceived of as some sort of eternal being, then I neither am nor have a self. Rather, and this is the notion of co-dependent origination, everything (including me) comes into being as part of an intricate set of causal dependencies. Thus whatever being I have is (*a*) fleeting (changing from one nanosecond to the next), (*b*) dependent on the causal conditions that gave rise to this nanosecond of existence, and (*c*) intimately interconnected with everything else in the universe. I can distinguish between my “self” and the keyboard upon which I type these words, but such distinction is based on heuristic principles of organization rather than inherent differences of existence.

If we are to successfully meet the criticisms of Dewey and Azelvandredre, we must cease thinking of ourselves as beings who are somehow detached or separated from the world (“objectively” viewing that world from a safe epistemological and ontological distance). Pedagogically, that may involve placing renewed emphasis on experiential education. Programmatically, it may mean providing a more central role for environmental studies. Conceptually, it may require

replacing or augmenting traditional Western notions of self and world with Asian ones like relational identity, *anatta*, and co-dependent origination.

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Endnotes

1. Azelvandre, p. 49.
2. *Ibid.* pp. 50-51.
3. *Ibid.* p. 51.
4. *Ibid.* p. 53.
5. *The Influence of Darwin on Philosophy*, p. 9.
6. *Ibid.* p. 3 (italics added).
7. *Ibid.* p. 1 (italics added)
8. *Democracy and Education*, p. 139 (scare quotes added).
9. *Ibid.*
10. *Ibid.* p. 152.
11. *Ibid.* p. 151.
12. *Ibid.* p. 141.
13. *Ibid.* p. 142.
14. *Ibid.* p. 143.
15. Azelvandre, pp. 55-56.
16. *Ibid.* p. 56.
17. *Ibid.*
18. *Democracy and Education*, p. 143
19. Azelvandre, p. 59.
20. *Democracy and Education*, p. 144.
21. Azelvandre, p. 60.
22. *Ibid.*
23. *Ibid.* pp. 52-53.
24. *Ibid.* p. 51.
25. *Ibid.* p. 53.
26. See, for example, Shrader and Thera.

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EXPANDING THE CONCEPTION OF PREJUDICE IN MULTICULTURAL EDUCATION: A THEORETICAL NOTE

Shangwi Tell

In discussing the nature of prejudice, much of the multicultural education literature defines it as a knowledge and judgement problem. While knowledge and judgement certainly constitute significant dimensions of prejudice, there is more to this phenomenon than these two inter-related features alone. I want to propose that the meaning of prejudice in general usage, and in multicultural education in particular, be expanded to explicitly include the conception of prejudice as a violation of rights. Here the Oxford English Dictionary (OED) is helpful.

Prejudice and Rights

The OED supplies two key conceptions of prejudice. The first is similar to the conventional notions advanced by most proponents of multicultural education:

- II. 2. a. A previous judgement; esp. A judgement formed before due examination or consideration; a premature or hasty judgement; a prejudgement. b. The action of judging of an event beforehand; prognostication, presaging. 3. a. Preconceived opinion; bias or leaning favourable or unfavourable; prepossession; when used absolutely, usually with unfavourable connotation.¹

This definition emphasizes judgement and the absence of examination of reality. People, according to this logic, form prejudices when they make judgements on the basis of insufficient knowledge, which is usually the result of not investigating reality. Such judgements, or pre-judgments as they are sometimes called, are typically associated with negative or unfavorable connotations. The second,

related, OED conception of prejudice reads as follows:

I. 1. a. Injury, detriment, or damage, caused to a person by judgement or action in which his *rights* are disregarded; resulting injury; hence, injury to a person or thing likely to be the consequence of some action. Now chiefly in particular phrases, as *in prejudice of*, to the (intended or consequent) detriment or injury of, *to the prejudice of*, to the (resulting) injury of; *without prejudice*, without detriment to any existing *right* or *claim*; esp. In *Law*, without damage to one's own *rights* or *claims*.²

This definition places rights squarely and explicitly at the center of prejudice. Here prejudice is conceived as a violation of right. In other words, prejudice is not merely a judgement and knowledge problem, but rather an outright denial of rights. This is not a minor point.

Shifting the focus from prejudice as a knowledge and judgement problem, to prejudice as a problem of rights, immediately brings to the fore the political nature of prejudice. It clarifies that prejudice cannot be eliminated simply by expanding knowledge. While deepening knowledge is positive and necessary, the shift implies a political orientation and approach to combating prejudice. It means recognizing and appreciating the existence of definite and specific interests in society that gain and lose from the violation of rights.

Class Roots of Prejudice

Prejudices arise from and are transmitted via the prevailing culture. It is the prevailing culture, in ideological and social form, that blocks the cognition of reality. By hindering individuals from engaging in an act of finding out and gaining real knowledge, the ideas, values, feelings, beliefs and outlook of the prevailing culture represent the first line of defense of the capitalist status quo.

Social relations under capitalism are dehumanizing and irra-

tional because one section of society – a propertied minority – exploits and oppresses the other section – the propertyless majority. In such an unequal and divided society the overwhelming majority are disempowered and marginalized; they have no control over their lives, no real say in the direction of the society. Economics, politics, education and culture are dominated by the wealthy few and thus the majority experience varying degrees of hostility, alienation and anti-social attitudes.. All this gives rise to an inevitable clash of interests between the broad masses of the people, who stand for enlightenment and social progress, and a small elite, who wield power and promote irrationalism and ignorance. It is in the objective interests of the capitalist class – the old, dying class – to render life in a dogmatic way, to prevent individuals from gaining real knowledge of their relations with nature and their relations with each other. This is how the capitalist class, as a class, fosters anti-consciousness and preserves its system of exploitation and oppression. Were individuals enabled to acquire real knowledge, particularly theoretical knowledge of society, they would become conscious of their interests and their role in affirming their rights..

The rights of all can be guaranteed and real knowledge can truly flourish only when the basis of existing social relations and ideas – the economic and political system – is renewed.

End Notes

1. *Oxford English Dictionary*, 2nd ed., Vol. XII, p. 356, original emphasis. 2 Ibid., p. 356, original emphasis except for “rights” and “claims.”