

Coffee Cups, Frogs, and Lived Experience*

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Abstract

Stories are how we make sense of experiences, thus providing the historical sense of life. To paraphrase Dewey, extracting at each present time the full meaning of each present experience enables us to do the same for our pasts. The continual reconstruction of the past in the light of the present is integral to full engagement with the present time. When we tell stories over a cup of coffee, we participate in the wholeness of language, which is itself a means of enacting the wholeness of life.

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Coffee Cups

Things are not objects. In fact, things are precisely the opposite of objects. When we are focused on things, we are actually also focused on ourselves. When I am focusing on the attachment of this coffee cup, I am actually getting back to myself quite fast, as well as to the entire history of Italian coffee-making, the people who are harvesting the coffee, etc. This cup of coffee is an assembly. (Latour interview, Prieto & Youn, 2004)

Jeanne Connell has been secretary/treasurer of the John Dewey Society as well as an active scholar of the work of Dewey and Louise Rosenblatt (Connell, 1996, 2005). She recently found a previously unpublished photo of Dewey in the archives of the John Dewey Center and had it printed on coffee cups (actually more of a mug). She then gave these to fellow officers of the society. Somewhat later, while we having coffee together, I was very pleased when she gave me a Dewey cup as well. As she did, she hesitated slightly, and laughed, wondering aloud what Dewey might think of his image moving into the realm of "crass commercialism."

I was of course pleased with the gift, and said that I thought he'd be pleased, that he wouldn't mind at all being associated with such a basic tool of ordinary life. I couldn't have known then how much was about to flow from that simple cup. As I poured the coffee I was drinking at that time into the cup, I reflected on Dewey's call to value the ordinary in human experience, in fact to see it as the core of all we think and do. We talked about that notion a bit, and then things began to take off.

As Latour says, when we focus on a thing, like a coffee cup, we actually focus on ourselves, and the organic wholes in which we participate. For me, there is no better symbol of conversation than a coffee cup. I know people who say "let's have coffee" meaning that they want to talk, but would be perfectly content to have the coffee turn into an ice cream cone, a glass of wine, or just a time to be together. That thought led to quickly to what Dewey supposedly said when asked to sum up his vast life's work in one sentence. To that impossible task, he replied "democracy is conversation." Was there a more appropriate object for his image? If there were to be a wrong place to place him, wouldn't it be inside a thick academic book instead?

A few minutes after our coffee, I walked by an undergraduate class, in which they happened to be discussing a paper I had written on the need for dialectical reading of the web. The professor, a colleague and friend, called out to me to stop and introduce myself to the class. After I recovered from the shock, seeking frantically to recall what I had actually said in that paper, I was able to get into a conversation with the students. We made connections between ways of interpreting the web, interpretations in other media, dialectical reading, and conversation. Someone then asked about the cup I was still carrying.

I asked if anyone recognized the picture, which was not the same as any published photograph, and I feared would be a somewhat obscure subject in any case. But several students knew it was Dewey, and contributed helpful accounts of pragmatism and Dewey's work. I, of course, couldn't resist talking about Dewey's view of ordinary life and conversation, which I felt was occurring in its best sense at that very moment.

As I continued to experience life with the cup, my story grew, which in turn enabled it to grow further, exactly what Dewey means when he says that making sense of experience prepares us for enlarged experiences in the future:

The ideal of using the present simply to get ready for the future contradicts itself. It omits, and even shuts out, the very conditions by which a person can be prepared for his future. We always live at the time we live and not at some other time, and only by extracting at each present time the full meaning of each present experience are we prepared for doing the same thing in the future. This is the only preparation which in the long run amounts to anything. (Dewey, 1938, p. 51)

I then recalled a conversation with another colleague, Betsy Hearne. We were talking with a doctoral student who was having trouble focusing her research. We asked her to say one word that felt most central to her way of thinking. But she was too clever for us and asked each of us to do the same. After some hesitation, Betsy said "story" and I said "inquiry." Two different words, but as we tried to elaborate, we realized that for us story and inquiry meant the same thing. Later, I read Betsy's own story about frogs, in which she concluded that "every frog is different" and "dead frogs are considerably less appealing than live ones" (Hearne, 1990, p. 41).

Stories are how we make sense of experiences, thus providing the historical sense of life. To paraphrase Dewey, extracting at each present time the full meaning of each present experience enables us to do the same for our pasts. The continual reconstruction of the past in the light of the present is integral to full engagement with the present time. When we tell stories over a cup of coffee, we participate in the wholeness of language, which is itself a means of enacting the wholeness of life.

Dewey's Theory of Inquiry

As Louis Menand (2001) shows, the pragmatist movement of the late-nineteenth century was in part a response to the massive destruction of lives during the US Civil War, and the inability of people to find ways to move forward without violence. Even worse, that violence was a pyrrhic victory. While it accomplished the end of legal slavery and maintained the formal structure of the nation, near-slavery conditions persisted for years, the nation stayed divided, and the problems of racism and injustice remained unresolved (Ladson-Billings, 2006). The violence of the war exacerbated rather than solved the problems, just as violence does in the present:

The ultimate weakness of violence is that it is a descending spiral, begetting the very thing it seeks to destroy. Instead of diminishing evil, it multiplies it. Through violence you may murder the liar, but you cannot murder the lie, nor establish the truth. Through violence you murder the hater, but you do not murder hate. In fact, violence merely increases hate.... Returning violence for violence multiples violence, adding deeper darkness to a night already devoid of stars. Darkness cannot drive out darkness; only light can do that. Hate cannot drive out hate; only love can do that. Martin Luther King Jr. (1967)

John Dewey was born in 1859, just before the war. Throughout his writings we can see his insistence on a moral dimension to life and learning. Moral growth is to be achieved through reflection on experience and on dialogue with others, something we do when we "have coffee."

The year 1859 was also the year that Darwin's *On the Origin of the Species* was published. Those are not entirely coincidental occurrences. While acutely aware of the moral challenges of racism and industrialization, pragmatists saw a promise in the developing sciences, especially in biology and statistics, and later, physics. Dewey in particular was deeply influenced by Darwin and what later fully emerged as the grand evolutionary synthesis. He saw the phenomenon of life as crucial to his theory of inquiry, and especially his theory of education: "The primary ineluctable facts of the birth and death of each one of the constituent members in a social group determine the necessity of education." He also saw that life implies growth, thus "education is all one with growing; it has no end beyond itself." These ideas became central in the development of the whole language movement and other progressive pedagogy (Y. Goodman, 1989).

Becoming a Unified Whole

For many people, notably those in universities, the value of learning is to allow us to rise above our baser instincts, to elevate thinking above feeling, theory above practice, abstraction over concreteness. Many others, perhaps most people, do the opposite, placing "what works" above ideas and frameworks. Dewey and his colleagues rejected both of these views. They saw instead that the problems with both intellectual life and the practical world lay in the breakdown of connections between the two, the severing of mind from body:

Thus the question of integration of mind-body in action is the most practical of all questions we can ask of our civilization. It is not just a speculative question, it is a demand--a demand that the labor of multitudes now too predominantly physical in character to be inspirited by purpose and emotion and informed by knowledge and understanding. It is a demand that what now pass for highly intellectual and spiritual functions shall be integrated with the ultimate conditions and means of all achievement, namely the physical, and thereby accomplish something beyond themselves. Until this integration is effected in the only place where it can be carried out, in action itself, we shall continue to live in a society in which a soulless and heartless materialism is compensated for by soulful but futile idealism and spiritualism. (Dewey)

I see the coffee cup as manifesting the coming together in action of the physical and the mental. It is an ordinary thing, which may be hot or cold, and provide sensual pleasure. But it also marks a coming together of minds. For Dewey, it was exactly in the ordinary experiences of life that we would find the core of our intellectual, moral, and social being. As McDermott says, "he believed that ordinary experience is seeded with possibilities for surprises and possibilities for enhancement if we but allow it to bathe over us in its own terms" (1973/1981, p. x).

Humans are living organisms, but human life adds a dimension not present in the lives of other living things. Or, do other creatures pause to reflect on their lives over their own version of a cup of coffee? At least in principle, we can learn from others, communicating our experiences across space and time:

Society exists through a process of transmission quite as much as biological life. This transmission occurs by means of communication of habits of doing, thinking, and feeling from the older to the younger. Without this communication of ideals, hopes, expectations, standards, opinions, from those

members of society who are passing out of the group life to those who are coming into it, social life could not survive. (Dewey)

Dewey's educational theory elaborates on this idea, going far beyond what is often meant today by hands-on learning or learning by doing. He sees the learner as a unified whole, in which the hands are as much an organ of thought as the brain. Moreover, he sees society as an organic union of individuals. Sharing life over a cup of coffee is one way in which we seek that unified whole.

Frogs

It is interesting to contemplate an entangled bank, clothed with many plants of many kinds, with birds singing on the bushes, with various insects flitting about, and with worms crawling through the damp earth, and to reflect that these elaborately constructed forms, so different from each other, and dependent on each other in so complex a manner, have all been produced by laws acting around us. (Darwin, 1859, p. 489)

Many years ago, on a beautiful fall day, I found myself, as a high-school student, walking across the Rice University campus with one of Rice's best-loved professors. He had the lanky frame of Bertrand Russell, completed with a shock of longish, white hair. His field was biology, which was not on my list of possible major areas to study. But instead of discussing his field, or the intricacies of college application, we began to talk about internationalism and world government.

This was heady stuff, especially for me, coming as I did from a family with conservative political views. Professor Joseph Ilott Davies and I engaged in genuine conversation. Although he shared his passion and deeply-held beliefs, he also wanted to know what I thought and why, and cared about my questions. I may not have asked, though I did wonder, about how a biologist came to care so much about democracy, and to see it as an idea to discuss so intently with one of the many high school and college students he must see. How was it central to his life? This question arose all the more so, given what I had learned in school about putting things into simple categories. Shouldn't we discuss plants and animals in biology class, democracy in government class?

I learned later that Davies had come to Rice in 1914 to serve as Julian Huxley's lab assistant. At that time, he had essentially a working-class occupation, cleaning lab equipment and preparing animals for dissection. But Huxley, who was chair of biology at Rice, and who interacted with Nobel prize winners and international scholars in many fields, became a mentor for him. At one point, Davies wrote a "poignant six-page letter acknowledging Huxley's mentoring." He says Huxley has "made twice the man of me and has put thoughts in my head that I had never dreamed of before; would it surprise you if I thought of trying for a degree at Rice!!!" (Boothe, 1997, p. 5).

While working full time, Davies enrolled as a student at Rice, receiving his BA, Masters, and PhD degrees there. Some time later, he took over both the classroom teaching and the lab for the introductory course [Biology 100]. In that role, he became renowned for his captivating teaching style. (Meredith, 1966).

It's worth noting that Huxley himself was an ardent internationalist, after his experiences in Germany leading up to WWI. Huxley's role as a caring mentor

undoubtedly played a role in Davies's thinking, but I believe now that his internationalist views were much deeper and more integrated with both his biology and his teaching than I had understood on that fine fall day.

Frogs, Alive and Dead

The first lecture in Biology 100 was a memorable one. Professor Davies entered the large auditorium and greeted the 200 or so students, all of whom he would soon come to know by name. He then asked,-

What is this course about? It's about you. You are many things, and you are each different from one another, but one inescapable fact is that you are all alive. You move, you breathe, you talk. But what does it mean to be alive? How is life possible?

Davies then brought out a large bucket. He reached in and pulled out a living frog:

Look at this beautiful creature. It, too, is alive, but it is so different from each of you. And there is a vast diversity of life you may only dimly understand. How can there be this incredible diversity? What accounts for the common features of life? What accounts for the variations?

Davies then placed the frog on the lab table in front of him:

Look at how the frog hops. That's one characteristic of its being alive. In this class we will dissect animals and plants to study their systems and organization. But whenever possible, we will study living, breathing organisms, because our goal is to learn more about life, not the parts of life..

He then picked up the frog and tossed it into the seating area. There were predictable screams, followed by more screams and laughter, as one student would toss it towards another. Then he pulled out a second frog and tossed it, then a third, and so on, each time asking his questions about life.

Finally he pulled out the last frog, and along with it a knife. With students watching intently, he chopped through the frog's neck with a single, quick blow. He then released the frog, and it too began to hop, without its head.

Look at this. You saw me kill the frog. We all know that it's dead and that nothing can revive it. Yet, it too will hop for a short while. Clearly, hopping alone is not what makes something alive, even though most living things do move. As I said earlier, we usually won't kill organisms, but in order to understand life, we will also seek to understand death.

Whatever else one might say about Davies's teaching approach or whether such a performance would be possible or even desirable today, it must be granted that he had engaged the students' attention. Students who thought they couldn't or didn't want to learn science found themselves asking questions and engaging in ways they didn't expect.

Davies showed in many ways how much he cared for both biology and the living organisms who were his students. Although he was an ardent proponent of biology and a scientific view of the world, his humanism stood out as part of, not in opposition to his understanding of the physical and biological world. That was reflected in the way his lectures ranged across art, literature, history, and philosophy. It was also shown in the way he talked about and exemplified a concern for moral

values, which he, just like the pragmatists before him, saw as integral to his view of life. His teaching prefigured Noddings's (1998) care theory:

We do not have to construct elaborate rationales to explain why human beings ought to treat one another as positively as our situation permits. Ethical life is not separate from and alien to the physical world. Because we human beings are in the world, not mere spectators watching from outside it, our social instincts and the reflective e ration of them are also in the world. Pragmatists and care theorists agree on this. The ought – better, the “I ought” – arises directly in lived experience. “Oughtness,” one might say, is part of our “isness.”

I don't know whether Davies described himself as a pragmatist, and given his time, he would not have encountered care theory per se, but he exemplified the idea that “ethical life is not separate from and alien to the physical world.” His work was a search for the wholeness that connected these realms and entailed life for the frogs and the students he loved.

Three Grand Questions for Living Organisms

The most important impact of that initial lecture was not to convey a set of ideas, but rather to raise one of the grand questions of biology. It fits well with Dewey's theory of inquiry, which rests on the transformation of problematic situations: *How do the various systems of an organism come together into a unified whole to produce life?*

Much of the course then explored the diversity of living organisms and the different ways their systems integrated to produce successful life, for with all their variation and different ways of being in the world, every living organism represents a successful adaptation. Toward the end of the course, Davies focused more and more on other large questions, including what biology had to say about religion, the human soul, and moral codes. His manner of addressing them drew as much from poetry and art as it did from biological theory. He even quotes Cardinal Newman in an admiring way in his *Lecture on [Human] Evolution*.

A key theme in the course was the interdependence of living things. Frogs need ponds; we cannot understand one organism without an understanding of the ecology in which it participates. That ecology includes much more than simple competition for resources, but complex and varied means of association,. As Margulis & Sagan (1997) were to say much later, "Life did not take over the globe by combat but by networking." Processes of symbiosis, cooperation, and mutual construction of the environment may be more important than competition for limited resources.

Along these lines, a second grand question became more central as the course neared its end: *How does an individual organism relate to other organisms, and to its physical environment?* In *The Triple Helix*, Richard Lewontin (2000) explores this question, noting that environments do not exist independently of living organisms. The features that change a physical space into an environment are often constructed by organisms, the most obvious case being the creation of an oxygen-rich atmosphere by plants. Even more fundamentally, what *counts* as significant cannot be disentangled from the needs and activities of the organism. Instead, a view of organic evolution as a constructive process is called for: “the actual process of evolution seems best captured by the process of construction. Just as there can be no organism

without an environment, so there can be no environment without an organism” (Lewontin, p. 48).

The idea of the continuity of life points to a third grand question: *How does an individual organism relate to its history?* Histories are individual, as we see in the processes of development and aging. But they are also properties of the community and the population. Every living thing is a product of its parents and those who went before. Moreover, it shapes those who are to come. Vertical (or what Dewey calls, *longitudinal*) relations through time complement horizontal (or *lateral*) relations of organisms to the physical world and to that of other organisms. This idea was reflected in the course through investigations of the histories of organisms.

Together these grand questions about the wholeness of individuals, the ecology, and continuity opened up a complex inquiry into the variety and processes of life, Darwin (1859) had presented these ideas a century earlier, seeing through them the beauty and wonder of life:

There is grandeur in this view of life, with its several powers, having been originally breathed into a few forms or into one; and that, whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being, evolved. (p. 490)

Professor Davies at the End

Two years after I first met him, Davies announced his retirement. In May of 1966 he delivered the last lecture for Biology 100 that year, and what was to be his last lecture after a lifetime of learning and teaching biology. Former students, colleagues, and people from all over could not stay away. It's difficult to say how many people attended. I'm certain that there was double the approved capacity of the already large auditorium, and that many were disappointed not to get inside.

Davies spoke with his familiar passion for learning and exhibited his continual caring for students. Although he had aged, he seemed to stride across the stage and speak with more energy than every before. At the end there was a thunderous, standing ovation for a man who had risen from lab assistant to professor and had devoted his life to learning and community. There was only one question: What will you do now? Davies paused, then replied that he didn't know, perhaps he would travel some.

A short time later, Davies died while grading final exams. During his life he had diverse interests, including photography, literature, architecture, and philosophy. But he was devoted to biology and to helping his students grow. Thinking about what made his life a unified whole, about its ecology and its history, I can't help but feel that the end of teaching meant that his life was severed, and that he had lost some of the essential wholeness of life. Some small solace may be found in the George Eliot quote he shared during his *Lecture on Evolution*:

Oh, may I join the choir invisible
Of those immortal dead who live again
In minds made better by their presence;

Davies interpreted this opening of "The Choir Invisible" as follows:

To me, these are grand thoughts, They take some of the sting out of death by recognizing nobility of character during the life of the individual, They lessen

the void of death by accentuating and perpetuating through new lives those virtues for which the individual was revered while he lived. (Davies)

Davies definitely influenced me, and I'd like to think that my mind was "made better" by his presence. In part, because of his course, I chose to major in biology, even though it meant (in the beautiful logic of universities) that I had to drop it because it was for non-majors, and to take chemistry and physics instead. Later, I chose not to go past the BA in biology, because I missed the holistic understanding that he offered and that had appealed to me in the first place about the field. Most of all I didn't like to chop off the heads of frogs. Nevertheless, I still continue to work with biology education projects. Perhaps more surprisingly, continuing to think about biology accentuates and enriches my understanding of education, democracy, and lived experience.

Connecting Coffee Cups and Frogs

These ideas, particularly Lewontin's characterization of environment, are remarkably similar to Dewey's notion of *situation*. Both emphasize a crucial entanglement of each individual with both the physical and biological world around it.

Experience does not go on simply inside a person. It does go on there, for it influences the formation of attitudes of desire and purpose. But this is not the whole of the story. Every genuine experience has an active side which changes in some degree the objective conditions under which experiences are had. (Dewey)

In *Experience and Education*, Dewey lays out what he calls the *criteria of experience*, continuity and interaction. It is striking to see how similar these are to the grand principles of evolution. He describes *continuity* as the longitudinal aspect of experience and *interaction* as the lateral aspect. Late in his life Dewey began to talk about ecology, which was just becoming more current in the discourse of the 1940's. In *Knowing and the Known*, he moves away from "interaction" to "transaction," which was later elaborated by Louise Rosenblatt (1978). But I believe that if he were writing today, he might choose a term such as "ecology," which does appear a couple of times in *Knowing and the Known*. That would foreground his view of society as an organic union (cf. Latour's assembly), not simply a system of interacting parts.

The grand questions of biology are relevant for people as living organisms. But humans also have special reflective and communicative capacities. To do justice to the full range of human experience, we need to reformulate the biology questions:

Unified whole: How does an individual grow as a unified whole?

Ecology/Community: How does an individual participate with the physical, biological, and social world?

Continuity: How does an individual participate with the history of lived experiences?

Lived Experience

Conversation is a good name for what is needed at those points where people employing different final vocabularies reach a momentary impasse. . . . The political discourse of a pluralistic democracy, as it turns out, needs to be a mixture of normal discourse and conversational improvisation. In the discussion of some issues, straightforward argument on the basis of commonly

held standards carries us only so far. Beyond that, we must be either silent or conversational. (Stout, 2004)

Wholeness is essential to life in the relatively constrained arenas of the coffee shop or the biology lab, but what happens in the larger world? In the context of a pluralistic democracy, how do we achieve that wholeness? What and how can we learn when the commonly-held standards are themselves in question? This last section explores one place in which those questions are central to community life.

The neighborhood around Humboldt Park in Chicago has a rich and varied history. Once it was a home for Jewish immigrants, including Saul Bellow's Augie March and Elaine Soloway's Division Street princess. Later it was home to Polish Catholics. Many other immigrant groups, religions, languages, and ethnicities have been represented over the years, and today it is home to Asian-, Mexican-, African-, and European-Americans. It is best known for Paseo Boricua, a half-mile stretch of Division Street, demarcated by two 59-foot-tall steel Puerto Rican flags. The neighborhood contains many Puerto Rican stores and restaurants, and is currently adding iron balconies and streetlights in the style of old San Juan, along with mosaics representing the 78 municipalities of Puerto Rico. As the community works to promote a safer and more vibrant neighborhood, it actively resists the gentrification that had forced it out to West Town, Wicker Park, and Ukrainian Village.

In a context of urban poverty and discrimination, with issues of gang violence, drug abuse, school dropouts, unhealthy lifestyles, and other urban social ills, Paseo Boricua has taken action to build a strong community. Community building there goes beyond familiar remedies such as economic enterprise zones or dropout prevention programs, to include active transformation of the lived environment. Moreover, that transformation has begun and continues to be defined by participation and ownership by community members. Puerto Rican identity is affirmed and renegotiated in relation to that of other members of a quite diverse neighborhood, to that of Puerto Rico, and to a variety of others, including university partners. The process exemplifies Maxine Greene's call for both opening and transforming public spaces:

it is not only a matter of admission and inclusion in predefined public spaces; it is...a matter of transformation of our institutions and public spaces...We need to make audible and visible the diverse ways in which identity is negotiated in our country and the manner in which it is affected by fairness, equity opportunities for free expression, and by the existence or the nonexistence of democracy. (Greene, 1998, p. 19)

Residents of Paseo Boricua have engaged in that transformative process themselves, building upon community funds of knowledge, but also upon community self-empowerment. Initially, much of the discourse focused on resistance. The Puerto Rican Cultural Center (PRCC) website www.prcc-chgo.org/pachs.htm quotes Buddhist monk Thich Nhat Nahn's call for a community of resistance:

...resistance, at root, must mean more than resistance against war. It is resistance against all kinds of things that are like war... so perhaps, resistance means opposition to being invaded, occupied, assaulted and destroyed by the system. The purpose of resistance, here, is to seek the healing of yourself in order to be able to see clearly... I think that communities of resistance should

be places where people can return to themselves more easily, where the conditions are such that they can heal themselves and recover their wholeness.

Increasingly, the discourse has moved from community resistance to community building. Among many community organizations (see Ocasio, 2006) are the following:

Juan Antonio Corretjer Puerto Rican Cultural Center

La Voz de Paseo Boricua, a community newspaper

Consuelo Lee Corretjer Day Care

Lolita Lebrón Family Learning Center

Andrés Figueroa Cordero Library and Community Information and Technology Center

Community Organizing for Obesity Prevention in Humboldt Park, a healthy lifestyles program

La Casita de Don Pedro, a community museum

Vida/SIDA AIDS Education & Prevention Program, a health center and programs

Café Teatro Batey Urbano, a club/study center for young people and a venue for social action, where they present poetry with a purpose, hip hop, and other cultural expressions

development of economic and commercial projects including a Puerto Rican-focused restaurant district

Many of these activities are designed and run by young people in the community and all are conceived as sites for learning for community members of all ages and visitors. The activities build on ideas of Paolo Freire, who spent time there, and in many ways represent a modern version of the work of Hull House (Addams, 1910). Throughout, there is an emphasis on the wholeness of both individuals and community (the frog) and dialogue across differences (the coffee cup).

The Pedro Albizu Campos High School (PACHS)

After realizing that only one in four of their young people were completing high school, Paseo Boricua established an alternative high school called Pedro Albizu Campos High School (PACHS), which is housed within the Puerto Rican Cultural Center. Although community leaders would speak of Puerto Rican independence, community resistance against violence, and solidarity with Puerto Ricans and other oppressed people, they realized that the young people above all need a nurturing environment for learning. In an ethnographic study, Rene Antrop-González (2003) found that teachers are very aware of these multiple goals:

Our students don't come here because they are consciously seeking a liberating education or because they support Puerto Rican independence. They come here because they know that this school will work hard not to neglect them and because they'll find out who they are. Hopefully, they will want to come back and continue their work in the community. –Iván, a teacher and principal of the high school.

The results at PACHS have been impressive. Today, three out of four students complete high school, some have gone on the college, and some have now entered our Masters program in Library and Information Science. There is also a successful

Family Learning Center for young mothers and their children. Both programs build instruction around students' lives and experiences, thus moving from a deficit model to an assets model.

There are many other factors in their success, including dedicated teachers and a curriculum relevant to students' lives. Most of all is the sense of a school community connected to a neighborhood community, with an opportunity to grow in socially-meaningful ways:

That's why I'm always at this school. This school is my sanctuary. I know this because once I step outside these doors my problems come back. They're just waiting outside the doors to smack me in my face and start all over again. I stay at this school because I don't have to worry about my problems. I got my mind set on other things. It's hard to describe but it's like a load is taken off me when I'm here. —Damien, a PACHS student (quoted in Antrop-González, 2003)

The success of the program has attracted non-Puerto Rican students. In some other circumstances, the diversity of backgrounds might be considered as a problem. One might predict even more of a problem in Paseo Boricua, given the emphasis on strengthening Puerto Rican identity and community. But PACHS seems to thrive on diverse interests.

Although the high school was initially founded as a site of Puerto Rican pedagogical resistance, it has now also come to fulfill the affective and cultural needs of the Puerto Rican, Mexican, and African-American students that call it their school. (Antrop-González, 2003)

PACHS encourages students to think critically about their learning experiences and to participate actively in their communities. In an unconventional setting, it is the comprehensive high school vision (Goodman, 2006). The curriculum is articulated on the PRCC website in terms of three major curricular areas. The first involves “the development of cognitive skills in the areas of Natural and Social Science, Mathematics, Communications, and the Arts.” In a sense, this is the goal of any high school, but there is an emphasis at PACHS on a unified whole, both across disciplines and between the school and the students. Literacy at PACHS means learning to read the word and to read the world (Freire, 1970/1993; Freire & Macedo, 1987). It means actively participating in that world as both critic and creator. This philosophy positions each student and each teacher as whole, living beings. One never hears talk of deficits, but rather of strengths and potentials for growth (Johnson, 2006; Valenzuela, 1999).

The second area focuses on “the development of self-identity and self-worth by analyzing the Puerto Rican and Latino reality.” Students learn how to act responsibly in the world, by first understanding themselves and their Latino heritage. This area ensures that the continuity of lived experiences is a present reality for students, that their daily challenges can be conceived in relation to the larger world and the experiences of others.

“The third area is designed to provide students with hands-on experience. Classes included are video, bomba y plena, typing, dance, guitar and journalism.” Students learn how to transform the world, to give back to their community. Recently, for example, students have been making podcasts about their school and community. Across disciplines of history, biology, English, mathematics, and others, students

learn about themselves as participants in physical, biological, and sociocultural ecologies. It is an example of the social justice youth development model, in which self, social, and global awareness guide growth (Ginwright, Noguera, & Cammorota, 2006).

The activities at PACHS are based on the premise that students need to use language to solve problems that are meaningful their daily lives in order to take charge of their own learning (cf. Goodman, Smith, Meredith, & Goodman, 1987). They write and share reflections about work in the community as a way of learning language, but also as a way of learning how to participate actively in community building.

It is commonplace nowadays to think of the classroom or the school as a learning community, even if that is more often achieved in name than in fact. Some have argued for extending to the community beyond, bringing neighborhood experiences into the classroom, as with funds of knowledge approaches (Moll, Amanti, Neff, & González, 1992), or taking classroom learning out into the neighborhood, as with service learning. All of these ideas have merit, and may be considerably better than what we see in many schools oppressed by the No Child Left Behind regime today. But the Paseo Boricua learning goes a step further. Rather than seeing the community as simply a resource, or as an application area for learning, it puts community first. In this approach, *the community is the curriculum*. The mutual constitution of community life and education is thus evident in everything the community undertakes. And all of those activities build upon genuine conversation.

Connecting the University and the Community

Recently, in collaboration with the Paseo Boricua community, my department has inaugurated a new Masters program in Library and Information Science. The aim of the program, known as the *Community Informatics Corps* (<http://www.lis.uiuc.edu/programs/ms/cic.html>),- is to recruit and mentor a cohort of Latina/o, African-American, and other students who are interested in a career enabling them to contribute to communities especially of groups underserved in society. Students focus their coursework on social entrepreneurship and community library and information services, so that they are prepared to apply what they've learned to the creation of innovative information services implemented within and across a range of community-based and public interest organizations.

The curriculum combines Saturday and summer courses offered at the Puerto Rican Cultural Center in Chicago, online courses, and summer courses at the Urbana-Champaign campus. Students have a blended experience that emphasizes service learning in Chicago neighborhoods yet offers them experience with online learning and integrates them with the on-campus program. Campus-based students have an opportunity to experience and learn from neighborhood life. One hope is that we can learn from Paseo Boricua and help make the university itself a place for wholeness, a healthy ecology, and continuity. A characterization, which is at one and the same time modest and daunting, is that we seek to establish a conversation between a large, elite, and increasingly remote university and the communities around it.

The model for my own Fall 2006 course on *Inquiry-Based Learning* (www.uiuc.edu/goto/ibo) originated to accommodate students in the CI Corps, and to benefit from the resources offered by Paseo Boricua, and the Puerto Rican Cultural Center. Students worked with community members on projects such as a Puerto Rican

Digital Archive, a literacy program for the high school, a hydroponics garden, violence reduction, and a community wellness program. The aim was to see how our developing understandings of learning, research, literacy, community, technology, and social justice could be integrated through action in the community. As Migdalia Jimenez, a student in the course said:

I've always been passionate about literacy and social justice. I also have always loved libraries. I just didn't know that those seemingly disparate interests could be joined. Growing up in inner-city Chicago as a child of immigrants, I spent most of my time at my neighborhood public library. Although my mother only made it to 6th grade in her native land of Mexico, she imbued us with a love for books. Reading opened up so many possibilities in my life because it provides access to information. For me it has meant the end of ignorance and the beginning of independent thinking.

There is no neat conclusion to this process, no simple formula for replication. We have encountered many challenges in working across divides of geography, language, institutions, and perhaps most importantly, the mundane realities of everyone's over-scheduled lives. Nevertheless, nearly everyone involved would find it difficult to go back to a curriculum in which the parts are dismembered like Davies's frog.

Conclusion

When I think about frogs, a disturbing thought comes to mind, one more frightening than Professor Davies's demonstration. Frogs have become one of the best quality of environment indicators. As human activity continues to damage the world around us, we can measure the destruction of our living world by the extinction of frog and toad species and by the appearance of malformations:

Malformed amphibians are now documented in 44 states, in 38 species of frogs and 19 species of toads, with estimates of deformities as high as 60 percent in some local populations. Scientists now agree that current numbers of reported malformations significantly exceed the normal statistical variation. (U. S. Geological Survey, 2002)

The wholeness of individual frogs is dependent upon the wholeness of their environments, and those environments are being chopped up as surely as the poor frog was by Professor Davies. We need to understand how the wholeness of the individual is inextricable from the wholeness of community and environment. And none of that can be understood without understanding the continuity of life. That lesson has not been learned on the larger scale of life on earth; we see the consequences not just in the loss of frogs, but in the destruction of young people.

Paseo Boricua seeks to maintain a wholeness of its environment, because community members realize that it is essential for the growth of each community member, and in turn for the continued vitality of the community. Recently, the community produced a brochure about its many activities (Ocasio, 2006). On the inside cover there is a quote about the Coquí, a tree frog, which is the unofficial symbol of Puerto Rico:

Dicen que el Coquí no puede cantar ni vivir fuera de la isla. Aquí, el Coquí canta a su isla con amor, sobreviviendo a la ciudad de los vientos aun en temperaturas bajo cero.- (Luis Padial Doble)

The page continues with thanks to contributors, then ends with this appreciation:

La taza de café puertorriqueña- that kept us going through the process.

Can we dream of an environment in which frogs sing, and people learn together over a cup of café? It's clear that the process forward at Paseo Boricua will not be trouble-free. But what provides hope for community members and visitors is an understanding of *learning integrated in life*. The life of the community and the individuals within depends upon a shared commitment to the wholeness of each individual, to that of the community, and to the continuity of their experiences.

As Professor Davies had shown, the frog is more than the sum of its parts; it survives because of its wholeness, and the wholeness of its environment. This brings us back to Dewey, who saw that neither democracy nor education could be reduced to procedures and piecemeal steps:

Democracy has many meanings, but if it has a moral meaning, it is found in resolving that the supreme test of all political institutions and industrial arrangements shall be the contribution they make to the all-around growth of every member of society. (Dewey 1920, p. 186).

Unfortunately, most political institutions and industrial arrangements in our modern world do not fare well on Dewey's supreme test. Rather than fostering growth for each member of society, they operate as if dissecting those members is what we need to do, and will tell us all we need to know about life, growth, community, and moral commitment. Fortunately, there are alternative visions of wholeness to give us hope.

References

- Addams, J. (1910). *Twenty years at Hull-House*. New York: MacMillan.
- Antrop-González, René (2003, Fall). This school is my sanctuary: The Pedro Albizu Campos Alternative High School. *Centro Journal*, XV(2).
- Boothe, N. (1997, Fall). New Huxley archive provides unique documents. *News From Fondren*, 7(1), 4-5.
- Connell, J. M. (2005). Continue to explore: In memory of Louise Rosenblatt (1904-2005). *Education and Culture*, 21(2), 63-79.
- Connell, J. M. (1996). Assessing the influence of Dewey's concept of transaction on Rosenblatt's reader response theory. *Educational Theory*, 46(4), 395-413.
- Darwin, C. (1859). *On the origin of species*. London: John Murray.
- Dewey, J. (1920). *Reconstruction in philosophy*. New York: Holt.
- Dewey, J. (1928). Body and mind. First published in the Bulletin of the NY Academy of Medicine. In *The Collected Works of John Dewey: Later Works Volume 3: 1927-1928 Essays, Reviews, Miscellany*, pp. 25-40. Southern Illinois University Press.

- Dewey, J. (1938). *Experience and education*. New York: Macmillan.
- Flores-Gonzalez, N., Rodriguez, M., & Rodriguez-Muniz, M. (2006). From hip-hop to humanization: Batey Urbano as a space for Latino youth culture and community action. In S. Ginwright, P. Noguera, & J. Cammorota (eds.), *Beyond resistance! Youth activism and community change* (pp. 175-196). New York: Routledge.
- Freire, P. (1993). *Pedagogy of the oppressed (Rev. ed.)*. New York: Continuum. (Original work published 1970)
- Freire, P., & Macedo, D. (1987). *Literacy: Reading the word and the world*. South Hadley, MA: Bergin & Garvey.
- Ginwright, S., Noguera, P., & Cammorota, J. (Eds.) (2006). *Beyond resistance! Youth activism and community change*. New York: Routledge.
- Goodman, K. S. (2006, September 20). *Education for a diverse society: What ever happened to the comprehensive high school?* Retrieved, December 29, 2006 from <http://www.districtadministration.com/pulse/commentpost.aspx?news=no&postid=17141>
- Goodman, K. S., Smith, E. B., Meredith, R., & Goodman, Y. M. (1987). *Language and thinking in school: A whole-language curriculum*. New York: Richard C. Owen.
- Goodman, Y. M. (1978). Kidwatching: An alternative to testing. *National Elementary School Principal*, 57, 41-45.
- Goodman, Y. M. (1989, November). Roots of the whole-language movement. *The Elementary School Journal*, 90(2), 113-127,
- Greene, M. (1998, December). Moral and political perspectives: The tensions of choice. *Educational Researcher*, 27(9), 18-20.
- Hearne, B (1990). *Choosing books for children: A commonsense guide* (revised, expanded, and updated). New York: Dell.
- Johnson, L. R. (2006). *History in our hands: Identity development, cultural ideologies of motherhood, and the critical practice of family literacy in Puerto Rican Chicago*. ProQuest.
- King, M. L. (1967). Speech delivered at Ohio Northern University, Ada, Ohio [<http://www.onu.edu/library/onuhistory/king/>]
- Lewontin, R. (2000). *The triple helix. Gene, organism, and environment*. Harvard University Press, Cambridge, MA.

Margulis, L., & Sagan, D. (1997). *Microcosmos: Four billion years of evolution from our microbial ancestors*. University of California Press.

McDermott, J. J. (1981). *The philosophy of John Dewey: Two volumes in one*. Chicago: University of Chicago Press. (Originally published 1973)

Menand, L. (2001). *The Metaphysical Club: A story of ideas in America*. New York: Farrar, Straus, and Giroux.

Meredith, S. (1966). Unforgettable Joseph Davies. *Rice University Review*, 1(2)

Meredith, S. (1966, July). Dr. Joseph I. Davies. *The Flyleaf*, XVI(4). (includes Dr. Davies's *Biology 100: Lecture on Evolution*)

Miller, R. E. (1998, September). The arts of complicity: Pragmatism and the culture of schooling. *College English*, 61(1). 10-28.

Moll, L. C., Amanti, C., Neff, D., & González, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory into Practice*, 31(2), 132-141.

Noddings, N. (1998). *Philosophy of education*. Stanford, CA: Westview Press.

Ocasio, Billy (2006, September). Puerto Rican Chicago: A holistic approach to community building. Chicago: 26th Ward, City of Chicago.

Olds, H. F., Schwartz, J. L., & Willie, N. A. (1980, September). *People and computers: Who teaches whom?* Newton, MA: Education Development Center.

Prieto, M. J., & Youn, E. S. (2004, July 05). Interview with Bruno Latour: Decoding the collective experiment. agglutinations.com.
[<http://agglutinations.com/archives/000040.html>]

Rosenblatt, L. (1978). *The reader, the text, the poem: The transactional theory of the literary work*. Carbondale, IL: Southern Illinois Press.

Smith, M. K. (2004) Nel Noddings, the ethics of care and education. *the encyclopaedia of informal education*, www.infed.org/thinkers/noddings.htm.
Last updated: April 17, 2005.

Stout, J. L. (2004, December). What's beyond politics. *First Things*, 148, 8-9.

U. S. Geological Survey (2002, September 27). *Where have all the frogs gone? Research may solve the puzzle*. Retrieved December 29, 2006 from http://www.usgs.gov/amphibian_faq.html

Valenzuela, A. (1999). *Subtractive schooling: U.S.-Mexican youth and the politics of caring*. Albany, State University of New York Press.

¹ The four quotes from Davies to follow are not exact, but instead are reconstructions intended to communicate the sense of of dialogue he conveyed, albeit in a lecture format._

² Community informatics (CI) is the field of study and practice devoted to understanding how information processes and technologies are used to help communities achieve their goals. CI is an option within the masters program offered by the Graduate School of Library and Information Science at the University of Illinois at Urbana-Champaign. Ann Bishop has been the lead person in making this program come into being, with active participation from Alejandro Luis Molina and others in Paseo Boricua. _

³ They say that the Coquí can neither sing nor live away from the island. Here, the Coquí sings to its island with love, surviving in the Windy City in temperatures below zero._

⁴ The cup of Puerto Rican coffee..._