Book Review

Arjen E. J. Wals, ed.

Social Learning Towards a Sustainable World: Principles, Perspectives, and Praxis. Wageningen, The Netherlands: Wageningen Academic Publishers, 2007.

Reviewed by Howard A. Doughty

Jeremy Bentham once famously defined economics as the "dismal science." He didn't know the half of it. In its current form, as practiced by the brightest academics, the most influential government officials, and the most powerful titans of commerce, it is worse than gloomy and depressing; it is largely false.

Alright, that may be a trifle excessive. It should be remembered, however, that economics is the most self-important of the social sciences, for no other gives itself more enthusiastically and methodically to the collection of allegedly empirical data and their manipulation through intricate statistical methods. Supply curves and demand curves, calculations of rates of marginal utility and all sorts of special treatments in the specialty of "econometrics" give economists bragging rights over anthropologists and sociologists, whose grip on mathematical research is commonly and accurately considered weak. In the alternative, economics is, its practitioners proudly proclaim, a "science." Nobel prizes are awarded regularly.

Economists can invent new forms of property. They can introduce "commodity futures" and "derivatives." They can analyze incomes and project interest rates and compute the costs and benefits of public policies and private plans, so that we can predict the future and make rational decisions about what to do in the market place.

Except, of course, that they do not with anything approaching precision, and we cannot because of their imprecision. And, we cannot for at least five other reasons.

First, not even the most dispassionate of investors is immune from emotion. In fact, when stocks, bonds and international financial markets set off on some incredible rise in prices (often called a bubble), brokers behave like coin-laden children in a cheap candy store. Conversely, when some serious decline takes place, they jump ship like rats, only hastening their doom. The result is that pension funds, mutual funds and high risk buyers of almost worthless mortgage paper pay little attention to their complex minimax solutions, and obey their lizard brain instincts instead.

Second, what we call the economy is an artificial abstraction, a shuffle of illusions and the location of little of real use value. When the exchange value of a currency rises or falls against the standard of the US dollar, nothing is altered except perceptions. A house is a house; a sack of potatoes is a sack of potatoes; a pair of shoes is a pair of shoes; and, a plasma television is a plasma television. These things can be built and bartered for something akin to their actual worth. Mostly, however, their market price is mediated through the rarified mechanisms of the finance sector that can invite people into a home with a sub-prime mortgage and toss them on the street a year later because the flexible interest rate escalated. They can also repossess the television set if it was purchased with plastic and the payments are seriously in arrears. The shoes and the potatoes can probably be written off.

Third, most of what people in advanced industrial or postindustrial society do as a form of "work" is not productive at all. Upwards of eighty percent of all wage and salary earners are in the tertiary or service sector, and most of them do little more than "chat" or press a keyboard every day. Insurance agents, psychiatrists, financial consultants, office managers, personal trainers, teachers, entertainers and professional athletes receive compensation for doing nothing at all that adds directly to our collective store of goods. This is not to say that their labours are inconsequential or in vain, but it does imply that work in the postindustrial, postmodern world is more a matter of appearance than material productivity.

Fourth, when we attempt to assess the health of our economy, we like to add up the incomes that people make and divide the sum by the number of people in the country under review. So, per capita earnings of \$250,000 per year (John McCain's boundary for "middle class" status in the United States) are considered a token of modest prosperity, whereas incomes of \$21,200 or less for a family of four is the official poverty line for Americans living in the contiguous forty-eight states in 2008-2009. But what do such numbers actually tell us? They do not measure the quality of our lives. For example, companies that put toxic waste in rivers and streams make money. People who try to remove toxic waste make money. If we have enough toxic waste disposal, the economy will be booming. Real productivity in material goods and even immaterial services are not calculated; instead, we are keen to measure the velocity of the circulation of money.

Finally, what we call macroeconomics involves volatile statistics which cannot be gauged with accuracy and assurance, yield reliable predictions, and be managed with confidence. Not unlike the cookie-cutter theory of evolution, economic change is comfortably conceived in terms of small incremental changes over long periods of time. Yet, memorable economic changes are often catastrophic (sectoral obsolescence, depressions) or triumphantly revolutionary (the rise of the internal combustion engine, the ubiquity of computers). Akin to the Gould-Eldridge theory of "punctuated equilibrium" as a model for biological evolution is the pattern of alternative ages of stability and incidents of spectacular upheaval in the mode, means and relations of production and distribution.

A consequence of our technology-driven hypercapitalism (what Marx expressed as "constant revolutionizing of production, uninterrupted disturbance of all social relations, everlasting uncertainty and agitation") is that we are in thrall to macroeconomic booms and busts. We seek "silver bullets," transformative technologies to wean us off foreign oil, fix the housing market, staunch the wounds of out-sourcing of jobs and trim down the massive growth of domestic deficit and debt. Our problems are seen as global, and we insist that the solutions must be structural. Big may not be better, and the addiction to growth (even in the form of caricatures, chimeras and simulacra) may ultimately be cancerous; but, current crises in economics, ecology and energy gives little room in our imaginations for notions such as E. F. Schumacher's "small is beautiful," Robert Solow's "steady-state economics," and even Gro Harlem Brundtland's "sustainable development." So, even when the topic is the ecological degradation and the urgent need for the reclamation of the environment, nothing less than mammoth strategies and measureless tactics will do. Our logic in seeking solutions is identical to our logic in creating problems.

The sense of urgency is, of course, not entirely out of place. Conversion to renewable resources, reduction of the rates of natural habitat destruction and increased prohibitions on all forms of pollution—air, water, soil and (who knows?) maybe even moral—are undeniably top priorities. To the incessant demands to "drill, drill, drill" must come a widespread "Prius" mentality.

Somehow, however, in the rush to megaprojects aimed at undoing the mindset that has emphasized domination over stewardship since the *Book of Genesis* was cobbled together sometime after the dissemination of the innovation of writing, our proposed therapies more than occasionally mimic the pathology.

That is why the book here under review is so important. It not only confronts the big issues, but it does so in a manageable form. It is driven by singularly expansive ideas of the sort that are needed to comprehend the immensity of the dangers our species faces as well as the hazard we pose to the Earth and its other creatures, but it points to solutions on a (dare I say it?) human scale.

Arjen Wals has undertaken a tremendously ambitious project, and has brought it to a successful conclusion. Packed thickly between a "Foreword" by physicist, systems theorist and sometime visionary Fritjof Capra and an "Afterword" by one of our leading critical educational theorists and unyielding advocates of democratic education, Michael W. Apple, are twenty-seven uniformly excellent chapters on a broad range of topics—all kept in order by their allocation to three necessary and completely complementary categories. There is also a useful "Introduction" by Arjen Wals and Tore van der Leij, and a satisfying "Epilogue" by Wals alone.

In *Social Learning Towards a Sustainable World*, Wals understands what many anthologists do not; namely, that grappling with crucial and complex issues is not a project that is best handled by emphasizing theory to the exclusion of practice, nor practical measures to the omission of theoretical concerns. As well, he appreciates the importance of a connecting link between the two.

Social learning is certainly a serious and complex topic. It has rarely been as adroitly handled as in this comprehensive volume. It restores much of my faith in the good sense once captured by Irving Langmuir, the Nobel laureate in chemistry in 1932. Langmuir once famously challenged the intellectual elite to keep their language comprehensible. "Any person who can't explain his work to a fourteen-year-old," he said, "is a charlatan." It may be that some of the contributions to this collection would unduly test the thought and vocabulary of a contemporary fourteen-year-old, but it would not necessarily defeat a very bright one who has a genuine interest in the subject and a dictionary at hand, and who has made it to adolescence without a socially induced chronic attention deficit disorder.

Wals has constructed his book with care. In the opening section, consisting of nine erudite essays, his contributors establish the need for (and the content of) a solid and specific theoretical basis for subsequent chapters. Entitled "Principles," it lays out a definition of social learning that proceeds from a naturalistic philosophy. It eschews metaphysical interventions, and holds instead that human beings and human processes can be explained on natural grounds without recourse to supernatural entities. It begins with the recognition that the biosphere is inherently capable of supporting life. Observing that all life-forms and biological systems obey (or disobey at their peril) rules of survival and adaptation, human beings can learn essential lessons from nature and from reflection on their own human nature. We can find out how to design ways of life that ensure survival, maximize complexity and diversity, and achieve sustainability. Using knowledge obtained from a thoughtful study of sustainable communities of plants, animals and whole ecosystems, we can derive not only the principles that describe how sustainability works, but also learn about the methods that nature provides. By close inspection of the logic of learning frames and hierarchies of knowledge, we can construct models—largely in the cybernetic patterns

discussed by thinkers such as Gregory Bateson a generation ago—that will help us devise scientifically grounded information-gathering and pragmatic decision-making systems to give us the best possible opportunity to maintain ourselves and simultaneously reduce our toxicity as the most lethal animal on Earth.

The relevance of thinking as a precursor to action is plain throughout Part 1, but special attention might be given to the third chapter on "the practical value of theory." Its authors pull no punches. Sustainable development, they say, is "essentially normative, contestable and radical." They insist that any concept of learning, if it is to be of use, must address the ways in which intricate and multifarious organizations learn in a manner that is at least parallel to the way that individuals learn. There has, of course, been much research done on individual learners by educational psychologists and evolutionary biologists of one sort or another; however, earnest inquiries into the learning behaviour of complex networks have lagged somewhat behind. In directing our attention to explicitly social learning, the aim is not so much to discover how people learn in groups, but to disclose how organizations from Senate Committees to wolf packs to redwood forests acquire and process information that will lead to self-preservative action. (The fact that not all learning is "conscious" begs and provokes explanation!)

In Part 2, Wals goes on to explore what he calls "Perspectives." Eleven contributions are provided which draw upon a remarkable diversity of sources from case studies of indigenous land use in the Bolivian Andes to a Dutch experiment in private sector businesses as they try to negotiate the path from the cold cash nexus of corporate profitability to a balanced concern with "People ('social well-being'), Planet ('ecological quality') and Profit ('economic prosperity')," and from explorations of how to design "action research" into educational programs dedicated to qualitative assessments of community learning in, for example, medicine and education itself to actual encounters with resistant students whose socio-cultural backgrounds inhibit their potential for activism—not least because they retain ideological assumptions about the proper tone of education and the values of unbiased presentation and objective information.

At this point, skeptics may begin to raise concerns. We can probably set aside the ease with which profits are equated with prosperity, and thus discount the "radicalism" of the project, at least from a leftist point of view. Nonetheless, there is an unsettling abundance of talk about talk. Preoccupation with "narratives" and "discourse" will be slightly perplexing to teachers and others who are unfamiliar with (or hostile) to educational approaches that reveal a predisposition toward cultural relativism, social constructivism and other fashionable distractions from the quest "to uncover an objective reality," and strive instead to investigate how we construct objectivity, or sedimented power, through the discursive production of meaning." The idea that apparently factual data and their meaning are human "products" and not "objects that exist in a delimited form in reality ready to be identified and mapped" flies in the face of what many people regard as "common sense." Overcoming this epistemological obstacle can be daunting, especially when it is recognized that a "political intervention" is needed to make the conceptual leap. If successfully executed, however, there are rich rewards to follow.

Part 3, the concluding section, deals with "Praxis." As understood by the ancient Greeks, the word refers to activities chosen in the absence of external coercion and consciously directed toward practical goals. For Aristotle, free men could engage in praxis in the domains of politics, economics and ethics, with the attendant practical knowledge geared toward informing action. In Wals' book, there may be a comparative absence of coercion, but there is no absence of urgency.

In the final seven chapters, we learn about how the principles of social learning and the perspectives on sustainability are applied in ongoing projects as diverse as partnerships between environmentalists and farmers in Japan, a watershed reclamation project in California's Sonoma County, conflict resolution in cases of disputes over water use in Europe, community-based education in South Africa, public-private debates in agricultural Ecuador and persistent problems of acquiring appropriate expertise in a farming community in Uganda. This latter study of "professional ignorance and unprofessional experts" exposes some of the problems with "top-down" programs for the dissemination of knowledge that do not work, in contrast with the social learning capacities of the people themselves to discover ways to adapt to new circumstances and acquire new skills—in this case, small-scale vanilla farmers learning to produce for export.

If the "qualitative" research strategies preferred throughout are disconcerting to those whose training and experience has exposed them primarily not only to quantitative measures of success and failure, but also to rigorous empirical standards for assessing truth claims, Wals' book will require persistence and patience. If the descent from the esoteric conversation concerning overarching theoretical considerations to a rice field in northern Japan seems abrupt, then the reader will have to display a certain nimbleness of mind and be willing to reconsider some old assumptions about what counts and what does not count as a rational economic strategy.

That reconsideration should take into account the inherent limitations of the "dismal science" as outlined in the beginning of this review. The origin of the word economics, we should recall, is in the ancient Greek word *oekos*, meaning "home" (those who have ever studied "Home Economics" should realize the name of their subject was a redundancy). Economics, then, is best practiced close to the hearth. Anything larger is fraught with danger, and the Greeks also had a word for the problems associated when we get too big for our britches (or our fiscal policies); it is *hubris*—arrogance in the face of the gods. At the same time, our avian coinhabitants of this planet have long since learned that they do best not to soil their own nests. Our *hubris* has made a nest of the entire planet. We need to learn some simple lessons about the economics of our home.

Because this is a book about the *real* economy and not the imaginary one with which we seem preternaturally concerned, no one who reads it should expect to come away with the kernal of a plan to save either Wall Street or Main Street. As I previously dared to say, it operates on a human scale; but, it does convey something of the template that is needed if solutions to our problems of survival are to be found. We must learn to live within the laws of the ancient gods, which include neither the "invisible hand" of market economics nor the metaphysical will of any currently available deity. The laws of the gods are metaphorical, and relate simply and effectively to the way in which nature works. The human tragedy arises from our indifference to the world around us and the lessons that it can teach. According to the creation myth in *Genesis*, God gave mankind "dominion" over the Earth. One interpretation suggests that this means "power over" the Earth. Another implies "stewardship of" the Earth. Both are supercilious. The first has brought us what Weber called "convulsive self-importance"; if Wals is correct, there may be time to try the second.

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