

“Can the Universities Contribute to Sustainability?”¹

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Nearly 50 years ago *The New Yorker* magazine published an article called “Four Academic Fantasies.”

One was particularly appealing to professors. Recognizing that the university’s development effort had a hefty budget but provided little benefit to them for improved salaries, benefits and research, the academic staff decided to address fund raising appeals directly to alumni donors. In short order their efforts succeeded, the vice-president for development resigned, went to graduate school, and took a teaching job in biology at Syracuse.

My favorite was the ‘publish and perish’ fantasy. Joining together the great research universities instituted a ‘very strict publication policy’ whereby publications by junior faculty were forbidden for seven years unless they were totally anonymous—not even your partner would know – or, if signed, were deemed “a work of real and obvious merit.” The result: “[in] twelve years seventy-two learned journals ceased publication. The survivors are half their old size and about three times their old quality Keeping up with one’s field is becoming almost a pleasure.”

My fantasy is that we will sooner rather than later be able to design an institution of higher learning (note, not education) that will meet the demands of sustainability. I assert that despite the determined efforts of individuals, many of whom are here, there is no institution that is near that goal. I also assert that meeting the needs of sustainability is fundamentally unattainable within the present structure of educational institutions. Our piecemeal efforts, though important, are like fingers in a leaking dike. But we cannot let them divert attention away from the longer-term efforts that are fundamental and systemic change that is necessary.

LANGUAGE

¹ These are rough notes toward a paper delayed because of unanticipated time constraints, and because I prefer to speak not to read. Some parts are cleaner than others because I have addressed some of the issues previously. Comments and reactions very welcome to stevev@igc.org.

The theologian and activist Rabbi Abraham Heschel reminded us that words create worlds. Thus, we must be certain that we are all using the same language if any serious discussion is to move forward.

Orwell argues that the telltale sign of corrupt political language is the continual repetition of prefabricated phrases put forth reflexively in lieu of thought:

When one watches some tired hack on the platform mechanically repeating the familiar phrases -- *bestial atrocities, iron heel, bloodstained tyranny, free peoples of the world, stand shoulder to shoulder* -- one often has a curious feeling that one is not watching a live human being but some kind of dummy... The appropriate noises are coming out of his larynx, but his brain is not involved, as it would be if he were choosing his words for himself. If the speech he is making is one that he is accustomed to make over and over again, he may be almost unconscious of what he is saying... And this reduced state of consciousness, if not indispensable, is at any rate favorable to political conformity.

This is particularly true when “sustainable development” (or “sustainability”) becomes our goal. What then is sustainable development?

First, sustainable development is not a synonym for ‘greening.’ The environment is important, necessary, but not sufficient. Yet even where ‘sustainability’ is introduced with statements concerning economy and society, even equity and justice, more often than not the activities are largely if not exclusively environmental.

Secondly, sustainability requires a vision, and is fundamentally a statement of society’s values. Sustainable development is not a thing, nor it is a technical problem to be solved. It is a process without an end. It is a social construct. It is not as if we will one day wake up in a sustainable world, having made the transition overnight. And as a process in a democratic society it must involve people who are not ordinarily part of the university’s dialogue, the poor, people of color, communities far and near. It requires listening as much as or perhaps more than talking, something universities are not as accustomed to doing.

Socrates: What we are engaged in here isn’t a chance conversation but a dialogue about the way we ought to live our lives. [Mark Edmundson, How Teachers Stop Cheating, NYT, oped, 9/9/03]

Thirdly, there is sometimes confusion as to what is being sustained: the institution or the society? This is not an idle question.

Speaking of words, we also need to be clear about the differences between “education” and “learning.” To me this is a difference between a passive process and active engagement where the product is explicitly behavior change not simply knowledge

gathering and attitude change. The issue is what we need to do to become a responsible actor (read, citizen) in society if movement toward a vision of sustainability is the goal? Nobel laureate Elie Wiesel: Speaking in 1990 of the Germans who were responsible for the atrocities against Jews and Russians during World War II observed:

They [the Germans] did not come from the underworld; some came from some of the best and most prestigious Universities in Germany: they had degrees and even doctorates in medicine, philosophy, jurisprudence and theology. In other words: they were not shielded by their education. What was wrong with it? It emphasized theories instead of values, concepts rather than human beings, abstraction rather than consciousness, answers instead of questions, ideology and efficiency rather than conscience. ("On Global Education." Global Conference on Parliamentarians and Religious Leaders. Moscow, January 1990)

Observation: Nearly everyone is an environmentalist if you review the poll data, and this has been true for many years. But this is an attitude, not a behavior as measured by recycling rates, CAFÉ standards and fuel usage, etc. It is a tick box on a survey.

Albert Einstein: The world is a dangerous place to live; not because of the people who are evil, but because of the people who don't do anything about it. (<http://www.brainyquote.com/quotes/quotes/a/alberteins143096.html>)

As Rabbi Abraham Joshua Heschel said, we need “to find a new set of presuppositions or premises, a different way of thinking...” I am sure Heschel would agree that we also need a different way of acting.

WHY CAN'T UNIVERSITIES FOSTER LEARNING AND BEHAVIORAL CHANGE TOWARD SUSTAINABILITY?

Sustainability is about the whole, about the sum of and the relationships among the parts of systems. Universities excel at parts, not the whole.

The world has problems; universities' have disciplines. Inter-, trans-, non-, multi-disciplinary approaches still place the attention on the disciplines.

Michael Sovern, while President of Columbia University, reflected on the fact that *the most exciting issues confronting society seemed to fall “at the interstices between the departments,”* an admittedly unexceptional observation. But then more than 200 years after the founding of that University (now 250 years old), and after decades of discussion and debate over ‘interdisciplinarity’, he and his colleagues could do no better than to suggest that they needed to “figure out” how to deal with this reality!

James E. Welch, Jr., GE Chair, in March 1994 argued that “boundaryless” is an essential operating principle in business. By this he meant “piercing the walls of 100-year-old fiefdoms and empires called finance, engineering, manufacturing, marketing, and

gathering teams from all those functions in one room, with one shared coffee pot, one shared vision and one consuming passion—to design the world’s best jet engine, or ultrasound machines, or refrigerator.” [Wall Street Journal, March 7, 1994] The principle should apply equally to colleges and universities where visions of sustainable development are concerned.

Can a student receive an A in ecology and an A in economics if he/she really understands the key concepts of the disciplines and is willing to point out the contradictions between these disciplines to the professor at the risk of receiving a lower grade? In economics, for example, equity is not about justice, but ownership; focus is on the short-term rather than the long-term, witness the discounting of the dollar; and externalities to the society as a whole are not deplored.

Yale’s President, economist Richard Levin, began his inaugural address in October 1993 by quoting Sophocles, “Numerless are the world’s wonders, but none more wonderful than man” adding that “the chorus sings of humanity’s power over nature.” Continuing, Levin observes that “We celebrate today our University—a monument to the achievement Sophocles extols. We preserve humanity’s achievement [in controlling nature]. We impart an appreciation of that achievement by our teaching and augment it by our research.” Not addressed, however, is the fundamental question that we need to address, namely the extent and consequences of our efforts to control and manage nature, and the ways we can move people toward action that would appear to be in their best interests.

The search for a technological fix is reflected in a report in the WSJ, 10/14/03 calling for weather modification research to manage climate issues, rather than dealing with the consequences and effects of our actions, is symbolic of the problems of universities.

John Raulston Saul: Management is about systems and quantification, not about policy and people.

Microbiologist Erwin Chargoff: Where expertise prevails, wisdom vanishes.

In his 1974 Nobel acceptance speech the economist Fredrich von Hayek began by observing the irony that economists at that time were being called upon to correct the problems for which they themselves were responsible. Little has changed, and economists are not the only ones at fault.

Amataya Sen on receiving Nobel was noted in the NYT for having a keen ethical sense despite his technical abilities. Charles Kindleberger, obit, 7/9/03, quotes Nobel laureate Robert Mundell (student of CK) “He brought into international economics some theoretical background but a great deal of worldly wisdom along with it. He had a very well-developed, quick and imaginative sense of the real problems of the real world.” Another Nobel laureate, Frank Modigliani in a NYT obit was observed as who tempered theory with experience of the real world. 9/03. John Dunlop in his obit, 10/4/03), was likewise noted for being “one of those people who moved back and forth between the world of ideas and the world of doers.” In economics, it appears, a concern for the real

world tends toward the exceptional: the conflict between the world's problems and the disciplines is still among us.

Ecological economist Herman Daly's manuscript, requested by MIT Press and peer reviewed, in the end rejected by the Press because a board member felt it was not 'economics,' underlines the narrowness of the discipline and its guild-like structure.

Einstein's observation about mathematics some years ago applies as much to science in general as we try to deal with the policy process: "the laws of mathematics, as far as they refer to reality, are not certain, and as far as they are certain, do not refer to reality." So too is the case in economics.

Politics is also omitted from the 'sustainability' disciplines and more importantly for the real world of sustainability.

"We know how to transform this world to reduce our impact on nature by several fold, how to provide meaningful, dignified living-wage jobs for all who seek them, and how to feed, clothe, and house every person on earth. What we don't know is how to remove those in power, those whose ignorance of biology is matched only by their indifference to human suffering. This is a political issue. It is not an ecological problem." (Paul Hawken, from a speech at the Bioneers Conference in Oct. 2002)

Lord Kenet: Politics is the art of taking good decisions on insufficient evidence.

Science does not reduce uncertainty. Rather it creates greater uncertainty. As science writer Andrew Revkin observes, "Like a flickering compass needle, science offers a trajectory toward truth, but not a recipe for dealing with it." (Review of Spencer Weart, *The Discovery of Global Warming*, Harvard, 2003, in NYT Book Review, 10/5/03,22)

In the real world, as philosophers of science Silvio Funtowicz and Jerry Ravetz have observed, "facts are uncertain, values in dispute, stakes high and decisions urgent." We must learn to live with and deal with uncertainty, which creates considerable discomfort in scientists.

The 'precautionary principle' is more the product of renegade scientists, like many here at Lowell, than of the mainstream.

There is little acceptance of the validity of alternative approaches to knowledge, i.e. indigenous knowledge.

Consider, for example, the following observation from a mid-1990s report of a meeting on the future of philanthropy called by the Rockefeller Brothers Fund that went unanswered by the participants: "many social problems like poverty might best be thought of as organic to capitalism and not subject to 'cure.'" The problem of poverty is accepted without question as a product of capitalism; the problem of capitalism—how we

organize our economic life—is also accepted as sufficient justification for the continuance of poverty, without question. Whereas is the outrage?

St. Augustine: Hope has two beautiful daughters: Anger and Courage; Anger at the way things are, and courage to change them.

Campus “greening” projects, or sustainability activities, look at parts too as do the disciplines. They rarely look, for example, at the institution’s investment decisions, either with respect to the impacts of the portfolio, or how the proxies of the shares they hold are voted. This does not meet the definition of a new fiduciary responsibility, nor does to seek to align all parts of the institution into a common goal. Nor do most activities deal with living wages for workers, or significant activities for both faculty and students in and for the communities surrounding the university, rather than meeting academic and scientific needs.

BARRIERS TO PRESENT EDUCATIONAL SYSTEM CHANGE

These constraints/issues noted are **systemic** and cannot be dealt with piecemeal measures, by definition. Nothing less than system change will be effective in dealing with the issues of learning and acting for sustainability. (See Bob Doppelt, Sustainability, governance and organizational change)

A system consists of two or more parts—within a university and in the university’s relations to the society as a whole.

Systems have specific purposes within the larger context they operate. Thus, educational institutions teach, train and produce research.

The ways parts of systems are arranged determine its performance. Educational institutions are arbitrarily organized with regard to sustainability, and as in the case of economics and ecology (as presently taught and researched) often in conflict. Disciplines are the problem and not part of the solution. Yet another obstacle to system change is fear of losing power and authority, which makes change in a university virtually impossible.

Systems need feedback. Not clear where that comes from for a university concerned with sustainability. They also need appropriate governance structures to receive and respond to feedback, another area where universities are lacking. This is especially noted with respect to universities increasing obligations to the corporate world for support, e.g. ag programs at the University of California that everything but sustainable.

WHAT CAN BE DONE?

Robert Hutchins observed when he headed the University of Chicago, “it is not a very good university, but it is the best we have.”

The best that I have to offer is that “change” become a singular focus of the institution, in research, training, relationship to the community, governance, etc. to see how the institution can be restructured with a vision and goal of sustainability. Not a department, or new institute, but the institution as a whole.

Ideally this would be done in conjunction with the city of Lowell from which the institution can learn and to which it is hoped it has things to offer. I see this as a matter of mutual benefit, not noblesse oblige.

(When I was an undergraduate in the mid-fifties Columbia’s letterhead read “Columbia University in the City of New York.” Today it reads “Columbia University.”)

Began with the assertion that nothing less than a new institution was needed for education/learning related to sustainable development. Easier said than done.

Most efforts at social change are, in effect, ameliorative: they seek to remedy immediate problems, but do not deal with root causes. Efforts at reformation can create some change, but they remain within the limits of existing systemic constraints. The most significant and lasting forms of social change are transformative. They pose fundamental challenges to existing systems, seeking to envision and create new systems. I am less hopeful that this last, fundamental type of change, which could create just and equitable systems, will be in place in the near future.

But what might begin us on the pathway toward this fundamental kind of change? Transformative social change implies significant alterations in the very structure of society. Thus it is necessary to identify the systemic barriers to achieving a vision, some of which I have identified above.

I believe that nothing less than a redefinition of what an economy can and should be is in order, because the university does not exist in a vacuum. But initiating such a process of transformation will be tricky. How do we even begin? Universities, research institutions, think tanks, and even religious institutions have become so dependent upon corporate largesse that their ‘objectivity’ is in question. Are there institutions that have not been co-opted or so corrupted by capitalism so that they could participate in a discussion that would probably last a decade or more about their own fate? How can the process be made truly participatory? How can it be made democratic, where power is shared not exercised, essential to the process and vision of sustainability? How can we learn new modes of speaking and interacting to make the process effective? This requires people in power learning to listen and respond, rather than to dominate conversations.

Creating a personal or even an institutional/community vision of a more sustainable future is the easy part. What is infinitely more difficult, and what is often overlooked, is describing and creating the process for creating a vision that is the product of truly public discussion and debate. How do the process and the resulting product become authentic by being inclusive? How can we build trust across race, class, sexual orientation, gender, and age? How can we cut across the factors, such as unequal power

distribution, age, ethnicity and race that have often hindered rather than helped to foster dialogue and action? How will such a dialogue be sustained among people already “too busy” dealing with survival? How do we manage a project that on the one hand has such clear goals, yet on the other hand has such ambiguous and ambitious outcomes? How do we overcome the forces that push towards short-term thinking?

We must look at all of the activities we will hear about today as experiments, and learn more about their successes and failures. We must also see how they interact and form a whole. Using the vision as a guide we will need to build new systems that reflect a view of the world that prioritizes social justice, equality and environmental soundness. We can look ahead testing ideas against the vision. At the same time we must engage in back casting as if we were archaeologists reconstructing the past from shards, as we look back from the vision to the present. This helps to avoid being caught in our present mindsets. Both approaches will help to identify paths and pitfalls.

It is also essential to begin the transformative process now toward a vision that will most likely not be realized in a year or even in a decade or more. As Rabbi Tarfon taught millennia ago, “It is not your obligation to complete the task [of perfecting the world], but neither are you free to desist [from doing all you can].”

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