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Roots of Economics, Ecology and Ecumenism: Foundations of the Land-Grant Household

Mike Ellerbrock[1]

An Enduring Question

Universities worldwide face a basic academic question: Is their purpose to use people to build knowledge, or vice versa? Each institution faces this question. Some make a clear choice and excel at research or teaching, respectively, while many institutions perpetually vacillate in painful ambiguity about their mission. This paper offers an answer to this fundamental question. It will be argued that Land-Grant Universities in particular have a unique and sound perspective on the issue.

We shall proceed by looking at what three core disciplines - *eco*nomics, *eco*logy and *ecu*menism - have in common. Often perceived as philosophic enemies, the disciplines have common roots in the ancient Greek notion of a household - *oikos* (Meeks 1985; Young 1992). First, we shall examine some complementary and competing principles among the disciplines regarding proper management of our earthly household. These principles uncover some larger commonalities between science and religion, which support the holistic wisdom of the Land-Grant System's mission. Exposing the roots of economics, ecology and ecumenism reveals a tri-partite household that is empirical, theoretical and transformative – the foundations of a Land-Grant University.

Common Roots, Diverse Goals

In their etymological meanings, the disciplines were originally defined as:

- Economics - study of the management of a household's financial resources;
- Ecology - study of the management of a household's physical resources;
- Ecumenism - study of the management of a household's moral, ethical and spiritual resources amidst a plurality of values. An ecumenical person is one who seeks common ground as a synthesizer among various perspectives and traditions.

To a certain extent, the choice of definitions we use sets the stage for conflict. Some scholars argue that the disciplines are hopelessly split because they serve or have adopted competing goals: economics - human welfare maximization, ecology - species' survival, ecumenism - moral freedom (Young 1992; Merton 1983). Other scholars are more optimistic (Costanza 1991; Daly & Cobb 1994; Nelson 1991). If we are to integrate the best insights each discipline has to offer about life on earth, then recovery of the notion of a household may serve as a common metaphor for fruitful conversation (Haught 1995).

First: How Big Is the Household?

Underlying many environmental issues is disagreement over the question: How big is the household? Consciously or not, many citizens view local environmental disputes in terms of whether or not they feel personally responsible for the property or natural resources involved. For example, the popular NIMBY (*Not In My Backyard*) mindset reflects the view that the world neighborhood is big and has many households. So, "I don't care where you locate the landfill (or nuclear power plant or prison), just not in my backyard!"

This view tends to focus on and argue over the size of the household, as defined by the area of mutual responsibility – the area of central overlap in Figure 1. If one is not at least partially responsible for the resource in

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question, then one's views about what should happen to it are irrelevant. This paradigm narrowly limits the collective household to areas of convergence among competing interests and schools of thought, such as economics, ecology and ecumenism. Adherents of NIMBY assert a small area of overlap. We live in a "global village" only to the extent of interaction among the disciplines. As we discover more areas of interaction, the household grows. Otherwise, the disciplines operate independently of one another, i.e., outside of the household.

A fundamentally different worldview asserts that the household is defined, not by the area of central overlap but rather, by the entire biosphere within which economics, ecology, and ecumenism - indeed all disciplines - operate (Figure 2). There is only one household, even though we as individuals are personally responsible for only parts of it. However, since all dimensions of the household are connected, we can legitimately place ethical demands upon those individuals and institutions responsible for the rest of the household.

This broader paradigm emphasizes recognition of the complex interrelationships at play throughout the household, compromise in meeting the needs of different members of the household, and tolerance of diverse views within the household. However, a radical expression of this view is the BANANA (*Build Absolutely Nothing Anywhere Near Anybody*) mindset which reflects the ultra-confident attitude that the household is very small; so small in fact that, "There is only one backyard and I know what's best for you and me and everyone else!"

Building on this broader paradigm, let's briefly examine some areas of the household where the disciplines interact. With an attitude humbler than the BANANA perspective, we can find areas of intersection that offer promising points of agreement and some that challenge us with legitimate discord. For example, important principles that respectively integrate insights from two of the disciplines include sustainability, cost, and diversity. Each principle challenges ideas held by the third discipline.

Sustainability

The intersection of economics and ecology (Figure 3) has something to teach those in the ecumenical movement, i.e., people searching for consensus amidst a plurality of values. To a certain extent, economic development and environmental quality are complementary, tending to rise and fall together (Batie 1989; Norton & Alwang 1993). Too many poorly-informed citizens think that economic development and environmental quality are mutually exclusive goals. Some citizens see "the business world" as all good or bad and conversely "tree huggers" in the opposite, equally extreme, light. People with such polarized views tend to quickly question the ethics of "the bad guys" on the other side.

However, if we look at the facts, we see that the most economically advanced countries tend to also have the highest levels of environmental quality, as measured by such indicators as access to safe drinking water, net growth of forest land, sulfur dioxide air pollution (Sheram 1993). The message may be that a nation's concern about environmental protection tends to follow - not precede or prohibit - attainment of a certain degree of economic advancement. Why? Perhaps because it is difficult to get poor, hungry people to take a long run view of their natural resource base. A higher quality of life for people tends to correspond with enhanced environmental awareness and management.

Cost

The intersection of economics and ecumenism (Figure 3) has something to teach those in the environmental movement: almost everything has a cost. Almost everything we do imposes direct or indirect costs upon us, or at least involves "opportunity costs," i.e., the foregone net benefits of not doing something else with a resource. This reality causes the economic dilemma in the U.S. Endangered Species Program (Souder 1993). It can be extremely expensive to save some species from extinction (as well as to *not* save some species), e.g., apparently thousands of acres for privacy and hunting/scavenging are needed for a pair of California condors to nest, mate and breed in the wild (O'Driscoll 1997). Opportunity costs reflect the value of what else could be done with such land.

Economists and theologians have traditionally agreed that there is a cost humans should pay for the mere privilege of living in the household. An extreme example of this principle is the medieval Roman Catholic Church's sale of

indulgences. Though the idea strikes many people today as a ridiculous anachronism, economists and theologians can understand the principle behind the practice. In the early Christian Church, sinners could fulfill their penance by proxy - paying someone to perform sacrifices on their behalf (Mahoney 1987). Since all sin damaged the household, restitution was required (and still is today in the Judeo-Christian system of secular jurisprudence). It was acceptable to hire a proxy *if* the amount of the payment was indeed a personal sacrifice relative to one's wealth.

From the practice of penance by proxy came the idea of sacrificial giving even when one had not sinned, which became institutionalized in the sale of indulgences. As in most cultures, some sacrifice in life was basically seen as a good thing for one's spiritual health and as a real or at least symbolic payment toward one's communal obligations. Though the principle was generally accepted, the practice got out of hand when someone (a pope?) assigned a discrete measure of eternal reward for different levels of sacrifice - in essence playing God - an arrogant proposition. However, as educators, we need to avoid the social tendency prevalent today to quickly and cynically ridicule and discard old ideas and traditions in their entirety merely because their expression eventually went too far.

Diversity

The intersection of ecology and ecumenism (Figure 3) has something to teach economists about the importance of diversity. One of economics' most valuable insights is the principle of comparative advantage. If parties (individuals, firms, regions, nations) specialize in producing those goods and/or services with the lowest real costs of production as measured by a party's opportunity costs when it produces each product, and trade their specialty for items produced by other parties, then all parties are made better off. The principle holds true for large and small participants – everyone gains! The message is compelling: *specialize and trade*. On a micro level, we do this everyday: we work at some specialized job and earn an income in order to be consumers of a wide variety of goods and services. We end up better off than if we tried to produce all things for ourselves. Money is merely the unit of exchange. Nations do this everyday on a macro level via exports and imports. Hence, the economic version of the maritime metaphor: a rising tide lifts all boats.

However, as powerful as the principle of comparative advantage has proven to be, *specialization requires diversity to be successful* – an important lesson from ecology (Young 1992) and ecumenism (Haught 1993). Ecologically, genetic diversity facilitates healthy offspring. Ecumenically, no single image or understanding of the divine Idea can capture such an infinite mystery, so multiple perspectives are to be expected. Economically, it does no good to specialize in our production of goods and services if there is nothing for which to be traded. Thus, we need trading partners to specialize in producing those other items we want in life. Hence, the metaphor of the healthy household as a mosaic.

Other Members of the Household?

Thus far, we have focused on disciplines who derive their very name from the notion of a household. Yet indeed, that original concept of the household included all disciplines of scholarly inquiry. So we can broaden our paradigm to embrace all intellectual, scientific, artistic, aesthetic, cultural and moral pursuits. And we can generally categorize the disciplines under the headings of the Natural Sciences, Social Sciences, and Philosophic Sciences (Figure 4).

Natural sciences like ecology search for physical laws that govern the non-human dimensions of the household. Social sciences like economics examine the interaction of humans with the natural world and each other, usually with less quantifiable certainty than the natural sciences. Philosophic sciences like ecumenism seek to evoke and nurture basic human virtues such as love, beauty, awareness, humility, passion, imagination, empathy, rhythm, gentility, wholeness, fairness, justice, unity, wonder, optimism and joy.

Furthermore, the boundaries between the natural, social and philosophic sciences are oftentimes fuzzy. There is much overlap and complementarity in terms of their methods, goals, and topics of study. This is to be expected when we consider their most basic commonalities. At their roots, the natural, social and philosophic sciences share some foundational methods and goals, as seen in the relationship between science and religion.

Scientific and Religious Thought

In his examination of scientific and religious thought, Schilling (1968) argues that all scholarly inquiry, including religion, has a three-fold nature: empirical, theoretical, and transformative (Figure 5). Humans learn and grow by evaluating or processing their real-life experiences in light of their preconceived notions about God and the world around them, sometimes altering their theoretical constructs. The most powerful insights, discoveries and revelations transform us – *draw us out* - into becoming new persons. This phenomenon of transformation underlies the original meaning of education, i.e., to be "drawn out" (see below). And, this tri-partite paradigm of scholarship underlies the Land-Grant mission.

The Land-Grant Household

When we view living, thinking and growing as empirical, theoretical and transformative, we are describing the Land-Grant mission of extension, research and teaching (Figure 6). Our work is embedded in reality, driven by a sense of wonder, and aimed at changing people's lives. We address actual problems, ask questions about why and why not, and empower people with knowledge. And none of the three parts is complete without the other two, which returns us to our enduring question.

A Land-Grant Answer

Again, is the purpose of a university to use knowledge to build people, or vice versa? I believe the wisest answer is, Yes! For the most part, it is a false debate. As the Land-Grant System has demonstrated to many students on and off campus, the most efficacious teaching occurs when reinforced by research and extension. The most fruitful research is theoretical, empirical and transformative. The most valuable extension is engaged in the present reality, draws on previous experience and existing knowledge, and explores future possibilities. It appears that the Land-Grant household has stood the test of time thus far because of its holistic wisdom.

Heart of the Matter

So what lies at the center of our Land-Grant paradigm (Figure 7)? Integrated education. As we learn more and more about the connectedness of all disciplines, the area of central overlap grows, necessitating greater emphasis on integrated multidisciplinary education. Students need to become synthesizers. And universities need to lead the way:

> *Who, if not the university, shall train the integrators? And what better way is there for the university to pull itself together than to try to pull the world together? Let there be a core course on Survival of the Species (SOS for short). Its object would be, first, to make each of us aware of our common peril. (If we can't get together out of love, perhaps we can huddle in fear.) Second, it would recommence the education of the whole [person]: the need for every learned [person] to know something about more and more, rather than more and more about something. Third, it could teach humility – the many knowns that are unknown; the many specific cures that cause unspecified ills; the difference between [humanity], created in God's image, and God. Fourth, it could inspire regard for the "other" – the other discipline, the other tribe, the other self, the other world of the inarticulate and inanimate (Botstein 1978).*

Abelson (1997) said it succinctly that, "*society has problems; universities have departments.*"

A Challenge

The information explosion, coinciding with declining resources for higher education, has generated severe academic stress in terms of curriculum design, i.e., what should be taught? Which is more important: interdisciplinary courses or technical studies in one's major field? Here again, we encounter a false debate:

> *Breadth is not a contradiction of depth, but its complement. No one person can know enough to put a man on the moon, in the sense that grandpa could know just about everything about managing his corner grocery store. So different kinds of people, with differing knowledge and skills and networks of friends and acquaintances, have to come together in organizations designed to transmute their separate expertnesses and their collective insights into wise decisions about real-world problems – which are all interdisciplinary, interdepartmental, interprofessional and (increasingly) international. And the priceless ingredient is this: Each of the participants in this complex choreography has to have some understanding of the whole scene in order to play a relevant bit part in the big complexity (Cleveland 1981).*

A Solution

The information explosion has tempted and enabled educators to cram and clutter the curricular household with more furniture and technical gadgets than most students can assimilate and use. Intellectual overload threatens comprehension. Too many bells and whistles can short-circuit the household. Technology is a means to enhance education, not an end in itself. Balance is essential. Thus, Boulding argues:

> *We must reexamine the whole process of formal education from the point of view of what is the minimum knowledge, not the maximum, which must be conveyed if the whole structure is not to fall apart. Any economizing of learning, therefore, is highly desirable (Boulding 1969).*

A Return to Education as Transformation

Let us approach this accelerating challenge by looking to our roots for guidance. As we continually sort out what material we feel compelled to teach, let us not lose sight of the ultimate goal of education: to “draw out” students into becoming new beings who can then reflect on their old self (Freire 1973; O’Connell 1990). It is actually a traditional, not new and radical, definition to see education as a process by which the teacher helps transform students by "drawing out" something from them, rather than "putting something" into them (see Webster's dictionary). Beyond putting information and ideas into a student's head, the ultimate goal of education is to then draw out her or his wisdom – an inherent capacity that is already there, that cannot be injected, but can be nurtured by the teacher. Ideas, information, facts and figures constitute input into the process, whereas the output is wisdom. This notion of education and human growth as transformation lies at the root of Western civilization and is reflected in common words we use today:

- Education (*educare*) - to "draw out" another person into a new being, role of the teacher is to draw out the capacity for wisdom inherent in the student.
- Appreciate (*ad pretium*) - to move "toward value," drawn by knowledge which attracts us, our movement reflects a commitment to what we are learning, an active (not passive) process.
- Understand - to humbly and in awe "stand under" transcendent/sublime knowledge.
- Ecstasy (*ekstasis*) - powerful information which causes one to "stand outside" of oneself.
- Knowledge (*gnosis*) - participatory knowledge that brings new life/being, attained via intimate interaction with the subject, originally synonymous with sexual intercourse.
- Assembly/Church (*ekklesia*) – a gathering of people "called out" to form a new community, based on commitment to some interests and beliefs in common, though disagreements will occur.
- Enthusiasm (*en theos mania*) - knowledge which excites, to "possess the divine" by having the wisdom (*logos*) and reasoning power of a god, the purpose (*telos*) of life.

To "know" something originally meant to participate in, not merely observe, a subject. Such knowledge (*gnosis*) brings enlightenment and an unbiased passion to learning. Thus, to be educated was to be drawn out of ourselves, to be emotionally engaged in learning, to change one's values accordingly, to become a new person. Humans alone (apparently) have this capacity for self-reflection that enables us to react to something we have experienced by looking back at our old selves before the experience. We can thereby see how we have changed.

In this light, the model Land-Grant institutions of the coming century will be those that remain rooted in their holistic mission - balanced education of the reflective learner who grows by approaching household problems with wonder and wisdom. Future leaders will still emerge from a household that is empirical, theoretical and transformative.

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