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Human Ecology for the 21st Century: Leading to Solve Big Problems for Real People

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For more than a century now, the field we call human ecology has been dedicated to a critical study of the human condition and to enhancing the quality of life for people all over the world. Yet for all this time, our discipline has been undervalued. I think the time has come for human ecology to take on a more central role in higher education. I believe that the 21st century should be an exciting time for us. [By the way, when I speak of human ecology, I am speaking broadly about the various disciplines associated with our field, not only the human sciences but also education, and family and consumer sciences.]

As you know, over the past 30 to 40 years, both the sciences and humanities have become too narrowly focused. A student interested in biology, for example, can no longer *major* in biology. No, that student must declare a more specific major. And it is the same with the social sciences. We've created curricula that are so narrowly focused that we're producing graduates who can't see the forest for the trees . . . and at a time when the world is confronted by a host of major problems that will only be solved by those who achieve the sort of broad perspective that is gained through collaboration and interdisciplinary effort. In a way, this is good news, however, because human ecology was founded on the idea that complex problems can only be solved by taking an interdisciplinary approach.

Human Ecology as an Essential Field of Science

That's what I want to talk about today—the interdisciplinary approach and how the science of human ecology can be positioned as an *essential* field of science, the one that can bind the various associated disciplines together and work collectively with many other fields—the fields of engineering, the life sciences, the arts, the humanities, to name a few—in order to find solutions to the biggest problems of the 21st century. In short, I'm saying that human ecology can and should lead the drive to improve our society and revamp our economy.

To position human ecology in this way, though, requires a clear vision of where you want to get to and a plan for how to get there. And I think the plan we have developed at UW-Madison should provide a good roadmap for other programs. Our plan actually involves three positioning strategies, each one aimed at achieving a specific goal.

Before I explain them, however, I want to talk briefly about one important and complicating factor. It is simply that we do not speak to an *uninformed* audience. This is because, by nature, human beings become students of human ecology from day one—an autodidacts in the literal sense, striving to learn first-hand the ways of the world—the habits and behaviors, the rituals and languages and customs and values that enable interaction.

And here's what makes it really complicated: All the while, every human being on this earth is intuitively building his or her own *particular* system for coping—every one of us, creating an individualized version of the grand strategies that humankind has developed for interacting not only with other humans but also with both (a) the natural environment and (b) what might be called the virtual environment.

Now, you might think this condition—all human beings at least superficially acquainted with our subject—would make explaining what human ecology is easier, and in some ways I'm sure it does. But, as all of you probably discovered some time ago, trying to teach something to a person who has already *intuitively* formed an understanding of it can often prove more difficult than teaching to a person who has *no* preconceived notions. It's like trying to write a text on paper already covered in text.

Frankly, I've found that very few people outside of our profession seem to understand what human ecology is about, but at the same time, most of them think they do. And, too, I'm often asked by

many alumni of UW, "Is human ecology a new school?" Or someone will say, "I'm sure it wasn't there when I was, back in the 60's. Well, of course the school was there. But if I remind them that back then it was called "Home Economics," they all say, "Oh, yeah . . . old Home Ec." And think they now know what human ecology is all about.

I don't know about you, but I am a little tired of trying to explain what today's human ecology programs do, which is much more than what they think, and I'm a little tired of trying to explain *why* it is different from what they think it is. In fact, I think we need to quit trying to explain. Doing that hasn't worked very well for us.

A New Brand for Human Ecology for the 21st Century

What we need instead, is an altogether new image, a new *brand*—a brand that will express our 21st century mission instead of our 19th century image. Now, by "brand" I do in fact mean just what you may suppose I mean: a mark that "lays claim" to a concept, in the way that the Nike name brand lays claim to the concept of top-notch sporting goods, or the Starbucks name brand has become synonymous with good coffee. That's what a brand does. It makes an abstraction visible.

To make our science visible, we need to brand human ecology not merely as the science that seeks to understand the human condition and solve the problems that confront humans. We need also to position human ecology as an *empathetic* science: a *human*-centered science.

Positioning Human Ecology as a Human-Centered Science

Earlier, I said that higher education today is often criticized for focusing too much on training specialists—researchers who focus narrowly on some specific technicality associated with a problem. And, too, many of these specialists spend their days crunching numbers and operating computerized data-analysis programs, confident in their belief that using computers removes the error caused by human subjectivity. This is where human ecologists can play a significant role. We can be training scientists and scholars and professionals to provide the type of thinking that has been lost—human-centered thinking, *empathetic* thinking—the thinking that computer programs and models cannot or do not provide. Yes, computers *can* do some amazing things and can do them much faster and better than humans can. They can calculate much faster and thereby recognize patterns far more quickly. And they are 100% rational, and for that reason they are probably more reliable pattern-recognition machines than is the human brain. But the one thing they can't do—not yet—is discern the *essence* of anything. They cannot tell you the key quality that makes that thing what it is.

Humans, on the other hand, are quite capable of discerning—and expressing—the essential quality of a thing. Even when given training in methodology and the analytical process—even when taught to think like a computer—a human mind can still make that intuitive leap to an insight because the human mind is also ruled by emotion, by empathy. That's really the difference: Computers are mindless brains; we are not. We can write poetry. We can imagine. We can think outside the box.

In a way, what I am proposing is a little bit radical because it *seems* to call for a reversal of a paradigm that has been in place since the Age of Reason first began. But no, I'm not proposing that we discount rationality and the scientific method. I'm merely proposing that we give more emphasis to a certain aspect of the human-centered process—the one that we have, over the past century, de-emphasized. Or at least it seems we have—and in doing so we have inadvertently taught our students an unintended lesson: that to succeed one must think as much *like* a machine as possible—objectively and analytically, not passionately and creatively.

At this point I can't help but recall Vladimir Nabokov's famous reminder, what he used to tell his students: That just as the best art depends on *precision*, the best science depends on *passion*. That's the one key component of creativity that computers simply lack: The essential quality that sets us apart and defines us and enables us to *synthesize*, to see the whole big picture all at once.

Positioning Human Ecology as a Synthesizing Science

I want to argue that human ecology should be a synthesizing science. This seems imperative now because, more than ever before, humans must cope with shortages of energy, water, and food, and with environmental changes, and also with increasing health hazards. I will even argue that human ecologists are best equipped to be synthesizers because we haven't become a bunch of narrowly focused specialists. We haven't put ourselves into tiny boxes. We have remained generalists, and we engage in drawing information from various fields of study and, in effect, collaborating with small-boxers in order to fashion a comprehensive understanding and, ultimately, comprehensive solutions—actually sets of solutions, processes, networks, and plans for resolving issues and creating a better world. We are, after all, *human* ecologists—emphasis on human—because we're willing to adopt a wide perspective based on a breadth of experience—which is the wellspring of empathy—in order to bring together in collaboration various constituencies all working on the same problem. And we're also capable of synthesizing the separate solutions they develop. Or to put this succinctly, we engage in a kind of thinking that can picture each solution as a part of a whole design of solutions. We can engage in a process known as *design thinking*.

Design thinking. Scholars and business practitioners at Stanford, Harvard, and several other ivy-league business schools have recently begun to apply design thinking in order to put empathy back into the search for essential truths and good solutions to problems. So far, most have used this kind of thinking to tackle problems related to business practices. I believe that design thinking—used as a synthesizing, human-centered approach to addressing real-world problems—can be a differentiator for those who work in human ecology. After all, design thinking isn't new to the field of interior design or apparel design, which originated in human ecology. So why let business schools claim design thinking and innovation? It definitely has a far broader application. It can and should be helping scholars and students working in many fields to create sustainable societies and livable cities. Just for example, good health is overwhelmingly achieved not in doctors' offices but out in communities. In fact, 75% of this country's physical good health can be attributed to lifestyle, not genetic make-up. Over the next decade, as Americans try to figure out what changes the Affordable Care Act (ACA) will bring to their lives and pocketbooks, we can apply the design-thinking process and present a vision that realizes the positive potential of the ACA as a system that puts communities at the center.

To do this, we at UW-Madison's School of Human Ecology (SoHE) have begun to promote the idea that we can serve as a campus hub for interdisciplinary and translational science by partnering with schools/colleges campus-wide. To accomplish this transformation, we have conceived of three initiatives:

***The Family Well-being and Mind/Body Relationships Initiative*.** This initiative will connect new discoveries in neuroscience and in the field of psychiatry to create a new way of seeing social obligations. We're calling it *mindful* parents, *mindful* schools, and a *mindful* community. Research has shown that balance, equanimity, and empathy help schoolchildren to learn, and that children who practice these things, when they become adults, suffer less stress and enjoy better health. They also tend to be more productive at work, and more likely to form positive and lasting relationships with others, which of course results in greater overall satisfaction . . . more happiness.

Financial Capability for Life Success. Every American institution of higher learning expects its graduates to master their subject areas, and most have programs to help in that endeavor. But most pay very little attention to helping students acquire the life skills essential in dealing with the complexities of life after college.

As a result, many college graduates in this country begin their professional careers without the know-how they need to achieve financial independence and attain their economic goals. To address this issue, we have now secured funds from both the private sector and the university to pilot a campus-wide program to help freshmen, junior, senior, and graduate-level students to prepare for life after college and also to equip them with the skills needed to become self-sufficient. This initiative will take the SoHE a long way toward becoming a center for collaboration.

***The Partnership for Women and Global Well-being*.** This initiative, developed in partnership with the Global Health Institute, will provide a holistic lens through which to examine women's legal and human rights, and also a way to promote their health, financial, and political power. Just about every

school and college will eventually become involved in some way, and the SoHE will be driving their efforts.

Repositioning the field of Human Ecology as an Economic Driver

Over the past decade, the field of human ecology has expanded in order to keep pace with the many social, economic, and demographic changes occurring so rapidly worldwide. And while the mission to improve the quality of life has remained constant, the ways in which we teach and conduct research have changed and, too, the people to whom we teach and provide outreach.

These changes will continue, particularly in light of the public's expectations regarding the economic impact of higher education. Our future depends on how effectively we can position the field of human sciences as an *economic* driver for the 21st century and how effectively we can make the field locally relevant and globally prominent, economically speaking.

To help these changes to occur, we at the SoHE have dedicated ourselves to making the school a pivotal part of the economic engine that drives the state of Wisconsin. As a consequence, many of those who have graduated from our human ecology program *have* gone on to work in a wide range of professions—in health and human services, in financial services, in education, in creative design, and in retailing. Together, these industries represent the bulk of Wisconsin's 65-billion dollar economy and a significant part of the nation's 3.4 trillion dollar economy. There is no reason why we cannot position our field over the next decade as an essential driver of the national economy.

We will also make sure that interested high-school graduates as well as state legislatures know that our current students and alumni play a key role in the economic development of our state and our nation. We will make clear to our graduates that we expect them to become leaders in their chosen professions, leaders in the sense that they will be the ones who understand the concept of the new knowledge economy. We will expect them to be the *essentialist thinkers* and the *design thinkers* that the new-knowledge economy will need.

Challenges and Opportunities

Now I know that on most campuses the human ecology program is small in comparison to the legacy programs. And as a consequence, human ecology programs are relatively weak in terms of influence. That may seem like nothing but a disadvantage. However, being small, and being misunderstood, does have its advantages. Smaller, misunderstood programs tend to be more flexible and able to take advantage of changes in the environment. We're not dinosaurs.

To illustrate how new and small puts us in a better position to take advantage of change, I offer the story of Netflicks. In 2000, Netflicks had about 300,000 subscribers. Compared to the market leader, Blockbuster, they were tiny. Nevertheless, by 2007, Netflicks had 31 *million* subscribers in the US alone. And Blockbusker had become extinct. How was Netflicks able to grow so fast against a company that seemed to have cornered the market?

They could take advantage of a new technology. They could take up the automobile because they weren't heavily invested in a horse-and-buggy mode of delivery. In fact, they weren't invested at all. Blockbuster owned all the horses. But cars made horses obsolete. Actually, my analogy understates what Netflicks did. Better to say that Netflicks saw which way the wind was blowing and invested in *airplanes*.

In other words, they didn't think inside the box. They thought like *essentialists*, realizing that their product was, essentially, an electronic product, a product that could fit on a disk and be sent by airmail—actually a product that wasn't even physical at all, one that could be sent through the *ether* of the Internet.

Knowledge is exactly the same. It exists in the ether. Human ecology programs can do what Netflicks did—take advantage of the technology more easily than the brick-and-mortar programs. We can also identify certain complex problems, and new areas of inquiry, that no other college or school has claimed and create unique programs to address those problems. In fact, there are many great examples of how this already is happening. I speak of peer institutions such as Cornell, Purdue, Georgia, Missouri,

Kansas State, Iowa State, Ohio State, Oregon State Universities—to name just a few—that have in fact created their own versions of human ecology and human sciences and family and consumer sciences.

Looking to the future, I urge all of you to see the unique opportunities that the new environment we all live in has to offer. In fact, who else on your campus is better suited to claim "consumerism" or "personal finance" than you? All it takes is a willingness to use a perceived weakness as an opportunity—as a chance to rebrand human ecology. A chance to promote it as not merely one more rigorous discipline but also as the essential science, the science that can help all the sciences devise ways to deal with the major changes that will weigh heavily on the world in the 21st century.