

IS 'DESIGN THINKING' THE NEW LIBERAL ARTS?



Peter Miller's piece about design thinking and history, more accurately archaeology (because archaeology deals with the past-in-the-present), is in the latest edition of the Chronicle of Higher Education.

Is 'Design Thinking' the New Liberal Arts?.

Here are some highlights that convey a key message – that human centered design and design thinking, about which I have had a good deal to say in this blog, need a sensibility tuned to history, to memory, to the-past-in-the-present, **an archaeological sensibility**, if they are to truly achieve their promise.

And the implications for how we organize our schools and universities are quite colossal.

This essay is the second in a series on how new ways of thinking about material culture, past and present, are reshaping teaching and learning.

Stanford's d.school sees itself as a training ground for problem-solving for graduate students that "fosters creative confidence and pushes them beyond the boundaries of traditional academic disciplines."

Whereas design schools elsewhere emphasize the design of products, Stanford's uses what the local culture calls "design thinking": "to equip our students with a methodology for producing reliably innovative results in any field."

What is design thinking? It's an approach to problem solving based on a few easy-to-grasp principles that sound obvious: "Show Don't Tell," "Focus on Human Values," "Craft Clarity," "Embrace Experimentation," "Mindful of Process," "Bias Toward Action," and "Radical Collaboration." These seven points reduce to five modes – empathize, define, ideate, prototype, test – and three headings: hear, create, deliver. That may sound corporate and even simplistic, but design thinking has been used to tackle issues like improving access to economic resources in Mongolia, water storage

and transportation in India, and elementary and secondary education and community building in low-income neighborhoods in the United States.

Last semester I taught simultaneous video-linked seminars with my friend and colleague Michael Shanks. I'm a historian working in New York City at the Bard Graduate Center. He's a classical archaeologist teaching at Stanford. The course focused on the practices developed by early modern antiquarians to study artifacts from the past that lived on into the present, and argued that those same methods could be used today by designers interested in the experiences people have with objects. [Link]

Michael teaches in the d.school in Stanford and brought design thinking into our classroom in New York. By the end of the semester I was fascinated enough to head out to Palo Alto to immerse myself in the ways of the d.school. What I discovered got me thinking about more than design thinking. A very important experiment in humanities higher education is going on.

Larry Leifer, professor of mechanical engineering and

director of the university's Center for Design Research, explains that at the d.school, "We build people first, then things." Indeed, the emphasis has shifted from traditional product design to the process of designing, and now to the process of designing producers, and even people – all with the aim of "social innovation." And that, in turn, gets at the core of what is significant about the d.school's work for the rest of academe, and for the humanities in particular: Human-centered design redescribes the classical aim of education as the care and tending of the soul; its focus on empathy follows directly from Rousseau's stress on compassion as a social virtue.

For Leifer, the d.school is a kind of anti-university. Universities and their academic disciplines, he says, provide "context-independent knowledge." The world and its problems are not, however, organized by discipline. Even if humanists still tend to look down on "applied" learning, Leifer argues, knowledge has to fit the shape of the problem, not the other way around. The d.school's learning is all "context-dependent," pulling whatever it needs from any discipline in order to solve specific problems. The "d in d.school," he says, refers

“not to design but to demilitarized.” He gestures to one side of the atrium. “Mechanical engineering: a body of knowledge that is extended and defended.” Pointing to the other side: “This is the anti-establishment, no journal, no research, no labs, no students, no degrees, no faculty.” In between, where he stood, was an agora-like open space in which students milled about, and where, equally, they can stage exhibitions, gather for events, or sit drinking coffee.

Could it be that every university needs a “d.school”? Do disciplines, in order to evolve and advance, need some place in which to play and from which to be provoked?

That is the role institutes can play within the current ecology of higher education. With independent identities, budgets, staff, and, most important, vision, they can offer a space for play and for focus. Native to Europe, they are still relatively rare in the United States. Anyone who has come across the arcane two-volume survey *Forschungsinstitute: Ihre Geschichte, Organisation, und Ziele* (Research Institutes: Their History, Organization and Goals) and leafed through its 782-page second volume, an A to Z listing of institutes

in Germany in 1930, when the book was published, can glimpse a world that could have been ours, but never was.

That same year, the Institute for Advanced Study was being founded in Princeton, N.J., in explicit imitation of what existed in such number in Germany. Since then, the Warburg and Courtauld institutes have flourished in London, as have the various Max Planck institutes around the globe. In the humanities, in the United States, we can point to the relatively late creations of the Getty Research Institute, the research unit of the Sterling and Francine Clark Art Institute, and the many humanities centers that have sprouted on university campuses.

The institutes support fellowships, intellectual projects in specific fields, and collecting; the centers have opened up new kinds of cross-disciplinary questions. Both, however, remain places where scholars take refuge from teaching and administrative demands – to be left free to do creative work. But the real labor of shaping students and making careers is still in departments.

By standing outside the professional structure of the disciplines – graduate training and tenure and promotion – institutes remain free to ask questions and follow less-frequented tracks across the intellectual landscape. The d.school – officially, after all, the “Hasso Plattner Institute for Design” – embraces this extradisciplinary position (they call it “multidisciplinary”).

We are far away from the old vision of humanities scholarship brilliantly captured in a casual aside by the French historian Fernand Braudel. Presented late in life with highly original works of scholarship, he asked if they were written in prison – the presumption being that conversation was generally inimical to creativity. The Stanford research seems to show the exact opposite: If one wants to promote original scholarship, one ought to bring together as many people as possible from as many different disciplines as possible. Almost by definition, that kind of creative interchange cannot happen in a university department precisely because there is simply too much that is held in common. Disciplines are about answers, or mastery, and therefore favor convergence. Institutes can be more

open to questions, and therefore divergence, because they are freed from gate-keeping, whether intellectual or professional. By the same token, humanities centers may also be too much a part of existing university structures to stand outside.

The challenge is how to not be too departmental, but also not too cut off from department life. The answer may turn on rethinking the separation between “research” and “teaching.” IDEO’s many design-thinking tool kits always include an extended treatment of research. One of the d.school’s basic courses, “Research as Design: Redesign Your Research Process,” aims to improve “the research process to make us more innovative scholars or scientists.”

Sounds good, right? But research in the d.school and research in the surrounding university’s humanities departments is very different. In the latter, research is about finding answers to the discipline’s questions. In the d.school, it is a process not of finding answers but of discovering questions, the questions that the subsequent design phase – in IDEO terms, “ideation” and “prototyping” – is supposed to answer.

Research-as-questioning is a much freer and more playful approach to discovery. It keeps us in closer contact with our natural disposition to curiosity and wonder. It is also much closer to pedagogy. Shaping classes to share the excitement and skills of doing research as opposed to communicating content could be another way of “flipping” the classroom, but one in which research centers could actually help rethink teaching.

On the other hand, as university-based readers of the IDEO tool kits would immediately see, research in the design world is very closely linked to action-oriented solutions, i.e. to client needs. In fact, close attention to the way “research” is described in IDEO’s own publications shows that it is all conducted in the present tense, with no sense that the past matters to the present. Everything is ethnography. Libraries, archives, museums, the great repositories of the human past are rarely called upon for help. That puts a contradiction at the heart of design thinking, given the premise of a human-centered design practice, and the fact that we humans are all sedimentary beings in whom the past lives on and helps shape our experience

of the present.

A truly human-centered design, if it takes culture at all seriously, would have to take pastness seriously.



To understand people we need to dig into memory and history

As my colleague Michael Shanks points out, design thinking needs to be seen as “necessarily

archaeological and represents what prior generations called 'the liberal arts' – the belief that knowledge from and about the past is important for living well in the future." In our class, students studied antiquarians – the early modern scholars of the material world who are the ancestors of all those who now study material culture.

Looking at their historical scholarship, our students isolated a series of practices modeled on the "method cards" developed by IDEO to actually help designers work. These antiquarian cards are anything but. Turns out that the antiquarians whose very names used to breathe their distance from us, and their distaste for us, are speaking to us. Shanks and I plan to teach a pop-up course in the d.school in which these cards would be used by design students to tackle complex present problems – and test the presumption that the past is a foreign country.

The absence of serious consideration of "pastness" in design thinking is a blind spot. It's also symptomatic of the way in which the balance of basic versus applied research is generally evaluated outside university humanities departments. But aside from the obvious fact

that without doing the basic research, we'll never have something we want to apply, the absence of "pastness" – and we can take that to be synonymous with "basic" research for the purpose of this argument – points toward a different sort of problem: of "complexity."

If we think hard about what the liberal arts teach, we find that the study of the past achievements of humans, whether history, literature, philosophy, music, or art, provides us with a richly nuanced appreciation for the complexity of human existence. We may live in a city or a suburb, on a farm or in an industrial slum, born into a family of means or poverty, but on our own we have only our own experiences to go on. What the liberal arts – or humanities – give us are the experiences of those who have come before us to add to our own. These surrogate experiences help us to live well in the world.

Where the liberal arts are about problems – they take the familiar aspects of life and defamiliarize them in the interest of interpretation – design thinking is about solutions. It's about taking the complexities of life and simplifying them in the interest of problem-solving.

So, is design thinking the new liberal arts?

Not yet.

Those 1,200 students a year taking courses and spending hours learning, some without any expectation of credit, seem almost like they are living out Cardinal Newman's idea of a university. It looks like liberal learning at its best. But without taking the measure of the way the past lives on in the present, and without acknowledging the educational value of defamiliarizing the familiar, if those courses were to replace the classical liberal arts, we would lose precisely the practical value of classical education: seeing ourselves as existing in time and managing a range of imperfect complexities.

Design thinking that took the past more seriously could provide a framework in which humanists and scientists could work together on problems that need to be understood and even solved, such as climate, food, poverty, health, transportation, or built environments. A colleague once told me of a complex research project of the sort beloved by design thinking. It aimed to help farmers in Africa reach some self-sufficiency. But because the project paid no attention to local

traditions of food and its consumption, something that went beyond the ethnographically accessible, the farmers ended up refusing to eat the bounty they had succeeded in growing.

Institutes, like the Hasso Plattner at Stanford, can be places of real exploration and new forms of teaching and research; in the world of discipline but not of it. We in the university, at many different organizational levels, may all need our own “d.schools.” But for them to really shape the future of university learning, they will have to do a better job of engaging with precisely what the university was designed to promote, and what design thinking, with its emphasis on innovation, has thus far completely ignored: the past.

Peter N. Miller is a professor and dean of the Bard Graduate Center in New York. His new book, *Peiresc's Mediterranean World*, is out soon from Harvard University Press.



Goethe in the Italian countryside – the past, all around us, is the key to who we are