Innovation Arts: Technology and Humanities, or Cases for Humanity

We propose to dedicate a semester to research through reading, interviews, and site visits in preparation for creating a new interdisciplinary course. This course would promote dialogue between the field of arts and Humanities and the field of technological development, and would be launched in the fall of 2019. The fall of 2018 would be our research semester, including a pilot graduate seminar to prepare TFs for the undergraduate course. It could join the new border-crossing General Education curriculum in the future. Among faculty members we count on to lead discussions and to develop studio techniques are Tarun Khanna, Jeffrey Schnapp, Danielle Allen, David Parkes, and Martin Bechthold.

The Issue, a Turning Point for Humanity

The 20th Century ushered in many social challenges that continue to test our intelligence and creativity. By now, ubiquitous digital technologies put humanity at an inflection point of unprecedented progress as well as threats. Innovation causes rapid changes and vast disruptions that affect every aspect of our lives. While new technologies empower us – with more efficiency, capacity to manage large data that can create transparency and that facilitates integration among physical, biological and digital domains – these same advances pose threats to morality and ethics. Technology is redefining what it means to be human. For example, privacy is eroding. This essential condition of individual selfhood is under siege from constant requests for our location, the content of smartphones and emails, and other private data. This amounts to surveillance which we experience daily. The threat to the democratic system is clear, because people who know they are being watched become conformist and compliant. Another example of technology’s threat to our humanity is a deformation of social connectivity. Friendship becomes virtual when we share it at a distance, when we forfeit the “face to face” encounters that underwrite ethics according to Lévinas. Without human contact to read body-language, or the time to listen with intentionality and care, our innate human skills for sociability diminish. In their stead, new social norms are likely to be less caring or friendly.

We could add other alarming signals, but instead we embrace the changes and enjoy their benefits, while proposing a countervailing current. It is training in aesthetic judgment for experts in technology – increasingly for all citizens. Judgment, more than reason, can support self-regulation and the mutual regulation of asocial behaviors. Aesthetics may seem out of place and even elitist, but it is a foundation of the Enlightenment. According to Immanuel Kant, aesthetic judgement is free from any interest and therefore apparently impractical. But Kant’s thinking progresses through distinct moments. Finally, he had an interest. It was to establish political freedom. His approach was to locate and to exercise the faculty of judgment, like a muscle gone flaccid from centuries of inactivity. And training begins with aesthetic taste; then – Hannah Arendt shows – it continues to the general faculty for judging anything. In other words, disinterest primes future conversations about many themes, some of them gritty. Without free judgment there can be no new agreement, only personal positions. Imagination, understanding, and judgment do the endless work of co-constructing society. Technological advance without the necessary pauses for judgment, deliberation, and agreement risk a free-fall into social chaos. Jürgen Habermas develops this line of thinking -- from personal freedom to collective agreement -- to arrive at “communicative action.”

Technology and sociability are in conflict now, and they generate complexities that affect everyone. Complexity is inevitable, given the interactivity among human systems, which makes it dangerous to ignore intricacy in order to reach agreements that promote successful interventions. Processes for establishing agreement are rooted in culture. By culture we mean both contradictory definitions that Raymond Williams identified: the social scientific definition (a set of shared beliefs and
practices) and the humanistic definition (a field for taking risks, for the trial and error of experimentation). Creative culture often unhinges the very paradigms that patrimonial culture defends, and then generates new shared beliefs and practices. That’s how we can have both change and social stability.

**The Goal, Technological Advance with Sociability**

We plan to create provocations and exercises for developing a collective and moral conscience among students. They will be engaged in the uncertainty of creating mitigations for the damage that unregulated progress can cause. This goal requires that students of multiple disciplinary backgrounds collaborate toward shaping the path of the 4th industrial revolution. The arts will be central to the explorations; they connect innovation and context with emotional processes. Through the arts, we can hope to integrate: our humanity, the environment, and digital developments. The freedom to think like an artist provides insights, processes and models. Art adds to engineering the pause for aesthetic judgement and the intrinsic value of beauty. Our pedagogical process is to challenge young people to engage with conflicting scenarios and to patiently explore, critique, and research the root causes of complex issues. After this stage of investigation and reflection, they will build models for intervention, using innovative arts and engineering tools.

**Examples of topics for discussions**

- Inequality
- Climate change
- Future of work: Robotics, Machine learning and co-creation
- Technology’s effects on culture: social networks and feeling of isolations and loneliness

**A New Pedagogy and Assessment**

Through this grant, Habbal and Sommer will guide graduate students to test and to refine proposed hypotheses through reading, discussion, and hands-on experimentation. Seminar debates and studio sessions to build prototypes will together explore the proposed challenges. For both the discussions and the creations, we will emphasize the students’ freedom to explore interventions and to wonder about alternatives. We expect students to suspend beliefs and to dismiss expectations. They will be encouraged to accept the nonlinearity and complexity of the challenge, as well as the uncertainty of finding entry points for the exploration. Students should find root causes beyond the linear Newtonian cause and effect, and must address and examine the scale of the systems; that is, look for point of interactions and feedback loops. Then, students exercise judgement about their own creations and about those of colleagues. Together, they will examine the consequences of their creations.

Among the outcomes of this mixed pedagogy will be a series of essays co-authored by Habbal and Sommer to articulate the centrality of arts and Humanities in the long-term development of sustainable technologies. The seminar will become the foundation for a proposed course, and the lectures will become part of a sustainable General Education course that responds to the College’s renewed emphasis on exploring new paradigms of research and interdisciplinarity.

**Learning outcomes**

Students learn to work in teams and to create consensus to advocate for positions. They become critical thinkers by creating cases for humanity through debates, as well as prototypes. They learn how to examine human systems, find root causes and create mitigations. Students gain an understanding of professional and ethical responsibility.

Devising ways to assess these outcomes will be part of our challenge, appropriating lessons from art’s practices of indirect communication to pose unanticipated questions that elicit fresh and unfiltered responses. There are masters of this method, and former Mayor Antanas Mockus of Bogota, Colombia, is one. A pre-seminar survey, and a post-seminar survey would ask the same questions, to be answered in 100-200 words, and learning outcomes should register a significant change in responses. The questions would include: a. How is change made? b. Who are your ideal or necessary collaborators? c. What is a double-bottom line? d. How do you measure success?
Proposed Budget

Request for $15k that will be used for:
- Hire students as TA to help in creating learning modules. ($7,000)
- Materials for experimentations. ($2,000)
- Travel to visit conflict sites, arts spaces, and factories. ($6,000)

Beginning bibliography


Habbal, Fawwaz. “Analysis for the study of large-scale Human Problems” 2014

“Collaborative Processes for Mitigating Large Scale Human Problems” 2015.


Levinas, Emmanuel. *Ethics and Infinity*, 1995


Schnapp, Jeffrey. et al: *Digital Humanities*,


Williams, Raymond, *Keywords*, 1971