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The Interaction Design Public Intellectual

Design (non-architectural) and computer science became disciplines in the university system around the same time, and in some respects HCI tries to be their bridge. However, I sometimes think it would be useful to admit that design and computer science have very different epistemologies, if not ontologies. HCI's efforts at convergence, invariably via appeals to cognitive science, tend to paper over fundamental incommensurabilities. This would all be academic if it were not for shifts in our "technomy" that have made design and computer science rivals. Lucrative starting positions as product designers in tech companies can now be filled by graduates of materially forming design schools or analytically coding-capable HCI schools. Like it or not, interaction design is now the messy term for this broad range of positions mediating more and more of the everyday lives of the global consumer class. I therefore use the term pragmatically, but also precisely because it signals the growing responsibility associated with the convergence of the fields of computer science and design. Indeed, throughout this confession, when I cite interaction design I'm referring to both design and HCI.

I often wonder what my interaction design colleagues think about many of the current developments in the world of tech. Do interaction design faculty endorse the Lean Startup-derived Minimum Viable Product approach that is the dominant form of "research" in tech development at the moment? Do they worry about the labor practices that are the back end of an Amazon Dash button? What are their views on the social systems consequences of the

massive investment in autonomous vehicles at the moment? Do they have opinions about precautionary versus proactionary principles as wearables aim to facilitate transhumanism? How would they advise a recent graduate who is being asked to design the message to an Uber driver, who is not an employee, that is critical of the smoothness of his or her driving as detected by surveilled accelerometer data? Given the scale and urgency of climate change, which research initiatives, in academia and industry, should be prioritized, and consequently, which research initiatives, no matter what their other merits, should be deprioritized, at least for now?

I wonder what my colleagues' opinions are because for the most part I cannot find their opinions. Interaction design academics are not, as far as I can tell, professing their views in accessible forums. But they should be.

I sometimes read interaction design scholars chiding other interaction design scholars behind the pay walls of academic settings—what else is CHI for? I rarely see these scholars criticizing the professional community of interaction design in which their students apply all they are taught about the field. And I almost never see interaction design scholars speaking out against the initiatives of the overwhelmingly wealthy technology companies that actually determine the direction of sociotechnical innovation.

It could be that most interaction designers have no problem with the state of the profession or the overarching directions its investors are sponsoring. However, I do intend "criticism" to refer more broadly to "argued evaluation." I do actively seek defenses of current tech company research directives or innovation releases. But I tend to find neither celebrations nor deprecations

by interaction design scholars in non-academic media.

Our media landscapes have fragmented over the past decade as the business models of newspapers and broadcast television have been decimated by search, social media, and portable screens. There has been, however, in response, a possibly surprising proliferation of discursive spaces. These may come and go with some rapidity in terms of form—blogs, Medium posts, newsletters, podcasts—and content aggregation—RSS, Twitter, linkbait aggregators—but they are providing opportunities for more or less well-argued critique. Part of what motivates me to write is the fact that interaction design practitioners, as opposed to researchers and educators in universities, manage to make good use of tools like Medium to quite extensively debate current developments in their practice.

So the venues exist and are being used for public critique. Why do I not see interaction design scholars engaged in these debates? Are they just too busy doing industry-sponsored projects and writing conference papers? It surely cannot be that they are repressing their critiques because they are so dependent on the largess of tech companies and governments for their research funding.

The one exception I should say is Don Norman's recent tirade against Apple's UX, though the argument may have been motivated more by Norman's practitioner days with Apple than by his career as an academic.

The power of privilege. If computer science and design have struggled to attain the status of active research disciplines in the university, then their reward is tenure—a system designed to encourage professors to profess publicly rather than just to their tuition-

paying customers. Given the number of scholars now fully tenured in the discipline of interaction design, I would have expected a robust presence by even just a few—regular columns critical of the UX of the latest round of startups; analyses of the inadequate human-centered research informing this or that government energy initiative; and so on. I can quickly name a handful of scholars in data security/privacy who are prominent public critics of private enterprises and governments, and yet in every one of those cases, I have never heard from an interaction design scholar about the various user-facing sides of those systems.

The responsibility of being pervasive. Interaction design as a profession can still feel like constrained service provision, but interaction designs now mediate almost all the experiences of the global consumer class. With the maturing of e-commerce, social software, and mobile computing, interaction design structures almost every aspect of everyday life. There are therefore a huge number of topics on which interaction design scholars could and should be taking positions.

For instance, the sharing economy essentially comprises peer-to-peer interactions facilitated by the UX of digital platforms. In these situations, interaction designers are not just reducing transaction costs, but rather are enabling “on demand” service provision for some by undermining the stable employment systems of others. Do interaction design scholars endorse this monetization of household possessions and even householders’ time budgets? Do they believe that it is good to use interaction design to mobilize underutilized resources, even when those resources are people? At the moment, interaction design scholars are conspicuously absent from these debates.

Engaging with lay peer review. It could be that academic argumentation depends on being peer reviewed, which the sorts of venues I’m talking about most definitely are not. Quite the reverse, a mob mentality seems rife that reinforces existing hierarchies of wealth at best, and sexist, racist, and classist bullies at worst. This, however, should be precisely what spurs academic intervention. It would be nice if the world still respected modernist

forms of expertise, but this is now the post-normal era of probabilistic risks and wicked problems, situations that are unavoidably value-laden and resolvable only through sustained consensus building. Our societies right now need interaction design experts in the public domain, explaining the difference design can make—the habits that follow making certain activities more convenient, the values reinforced by systems that reward this or that behavior, the complex dependencies associated with automating some actions and prompting others with predictive analytics.

From criticism-in-action to criticism-on-action. But let me put the argument another way. Design proceeds by way of critique. If a problem



requires the creative approach of design, there is no way to specify the right response, only to iteratively identify a range of inadequate responses. This is why design education happens by way of desk critiques in studios. When students are given design challenges and studio leaders crit their various responses, students are not only learning domain-specific knowledge in the form of design precedents associated with that particular kind of challenge, they are also acquiring procedural expertise by being critiqued. In other words, design students begin to internalize the critiquing they receive, developing the capacity to crit their own designing, with the expertise that Donald Schön said marks a “reflective practitioner.” This situated, pattern-based epistemology, which is used by design to evaluate

projected futures before materializing them, is probably incompatible with the evidence-based approaches of more positivist versions of HCI, for instance.

Schön recognized different levels of reflection, from in-action evaluations of micro design moves, up to what he later called “frame reflection.” Without higher-level critique of overall directions, the reflective practitioner is at risk of validating, through tight action research cycles, a response to a situation that works but is heedless of wider consequences. Careful design of a wearable to create a beautiful interaction around an apparent health concern can fail to take responsibility for the ecological impact of the e-waste that all wearables become at the end of their use life.

The essence of design, as critical, depends on wider critiques exceeding the situated aspects any particular project. Where are these critiques?

Interaction design scholars, especially those with tenure, should be making public critiques of overarching directions in the “techonomy,” not merely out of a kind of civic duty that comes with the privilege of their tenured expertise, but also because the very expertise that their discipline cultivates depends on these critiques.

I do hope in the future to see my interaction design colleagues taking more public positions. I hope to see, for instance, public domain arguments on why it is appropriate to enable through interaction design citizen science rather than bolster government-backed expert agents, or why it is appropriate to enable through interaction design getting same-day water delivery rather than using citizen science to hold governments accountable for the right to clean drinking water.

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