## Naoki Ueno's Transformative Practice

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Abstract: Reflecting upon scholarly engagement with Naoki Ueno beginning in the 1990s, this commentary recalls the particular commitments of Ueno's research practice and their relations with studies conducted under the auspices of the Work Practice and Technology research group at Xerox's Palo Alto Research Center. Those lines of connection are further traced through the contributions to this special issue, emphasizing the eclectic, and also synthetic, contributions of Ueno's body of research, as well as the research that it has inspired.

My engagement with Naoki Ueno began in the 1990s, through our shared interest in studies of work informed and inspired by theoretical framings at the intersection of ethnomethodology and science and technology studies. Together with his long-time collaborator Yasuko Kawatoko, Ueno's enthusiasm for this programme of research brought us together not only in our writings, but also in a series of exchanges between Palo Alto, where I was then based, and Tokyo, the home of Ueno and Kawatoko's research and teaching community. I recall the moment when, having invited me to Tokyo and then been extraordinarily kind in meeting me at Narita airport in their car, Ueno, Kawatoko and I approached a highway toll center that presented us with an overwhelming array of (to me completely unintelligible) directional signs. As they hesitated in their choice of which lane to enter, Naoki turned to me and declared simply 'Bad interface!' This concise assessment has come back to me many times since, when faced with other bewildering sociotechnical arrangements within which timely courses of action must be generated.

Our primary intellectual work together was focused on an earlier special issue of MCA, co-edited by Charles Goodwin and Naoki Ueno in 2000 under the title 'Vision and Inscription in Practice.' My own contribution to that collection was a study of the use of a computer-aided design tool by a civil engineer, at work on establishing the anchoring structures for a bridge over the Carquinez Straits (Suchman, 2000). Ueno and Kawatoko were both at the time engaged in intensive studies of a Japanese factory, focused on the situated production and contingent use of ordering devices like a 'standard plan,' among both workers and managers. In his own contribution, Ueno drew among other sources on an earlier paper of mine (inspired in turn by Lynch, 1988) in which I explored the double agencies of ordering devices that are at once integral to the work of a particular site (in this case, the operations room of an airline), and a tool for its oversight by actors located elsewhere (those concerned with monitoring the airline's record of on-time departures) (Suchman, 1993). To think through this idea in relation to the factory, Ueno developed the metaphor of 'ecologies of inscription,' to describe the multi-layered, partially intersecting lines of action and accountability that he found there. Both Ueno and Kawatoko's papers - and indeed the issue overall - were characterized by close attention to what Charles Goodwin, in his introduction to the volume, described as the ways in which "vision and classification are accomplished through public discursive practices in which objects, images, diagrams, talk, the body, standards, encompassing activities" all play a central role (Goodwin, 2000, p. 1).

The papers collected in this current special issue, almost two decades later, pay tribute to the nexus of thought and research of which Naoki Ueno was an integral part. Yasuko Kawatoko explores relations between traditions – in this case those that surround the weaving and merchandizing of an indigo-dyed striped cotton distinctive to Japan's Matsusaka region – and the processes through which they are reiterated and transformed. Beginning from the premise that "human agency can only be understood within the dynamics of processes that continuously reshape it, such as the development of activities and the formation and transformation of socio-technical arrangements" (this issue, p. X), Kawatoko examines the ways in which the women's collective named the Yuzuru Party has, since the early 1980s, regenerated their sociomaterial agencies as traditional weavers. In this process stories and material practices are woven together (albeit not without tensions), to sustain the energy and commitment of participants in teaching/learning the history and craft of a shared social object that is itself contested and unstable. The Yuzuru Party are what Jean Lave (2011) has eloquently characterized as apprentices to their own changing practice.

Ueno, Sawyer, and Moro's contribution to this issue reflects on three cases of collective/community design in Japan, emphasizing again the dynamic inter-relation of cultural history and emerging sociomaterial agencies. The first case follows the lines of Ueno's own shifting and expanding interests from the shop floor of the 1990s, to the very different production sites of 21<sup>st</sup> century digital infrastructures. Emerging from a 2012 'hackathon' in Ueno's lab, the idea of the Yokohama Historical Field Museum was to make the city's past present, through the creation of an application by which locations within the contemporary city could be seen as they had been rendered in traditional 'U-kiyo-e' prints and paintings. Like the weaving revival described by Kawatoko, this project reanimated a practice originating in the 17<sup>th</sup> century in order to revitalize the present. Understood as agencies enabling of and enabled by culturally and historically specific sociotechnical arrangements, the making of the virtual museum comprises another mode of vision and inscription in practice. Unfolding as a complex experiment in municipal co-development, this project joined Ueno's research with that of others engaged in exploring the problems and possibilities of practice-based participatory design.

The second case discussed by Ueno, Sawyer, and Moro offers further examples of the reanimation of cultural history in the present, in this case the activity of *bunraku*, or traditional puppet shows. Analyzed as a heterogeneous economy of exchange and as a (re)imagined community of practice, the case demonstrates that initiatives like this one emerge not through modernist rationality but multiple, partially intersecting logics. The final case, emerging in the context of the financial collapse of 2008 and the material collapse of Japan's natural and built environment in the earthquake of 2011, is once again a mode of future-making based in the revival of longstanding, albeit marginalized, social and economic relations. The *maayu* system comprises a market of various modes of exchanges, and as Ueno, Sawyer, and Moro observe, "because it is not bill- or coin-based and the amount of money circulated is not controlled, the balance can be minus yet not considered a debt. This shows that it is not a mere flat currency circulated in a limited local area. It is an original system involving differing agencies from ordinary economic activities" (this issue, p. X). In each of these cases, any simple equation of design with the new is clearly inadequate; indeed, the very dichotomy of old and new, traditional and novel, is undone.

Nishizaka's contribution to this issue takes us further into two aspects of the theoretical framework that Ueno embraced. The first is the premise that rather than something that

precedes situated practices, context is itself reflexively (re)constituted in and through our orientations to, our enactments of, it. The second is an orientation to learning as ubiquitous, and integral to human being and becoming. Within that frame, Nishizaka examines "the situated restructuring of multiple bodies in the environment in which they find each other" (this issue, p. X). Inspired by the interactional analyses developed most brilliantly by Charles and Marjorie Goodwin and Christian Heath, this mode of investigation attends closely to the ways in which "bodies are perceivably arranged in the interactional environment"; that is, to the situated co-production of an intelligible and concerted social world. More specifically, Nishizaka develops an understanding of how bodies can come to be seen by participants as demonstratively analogous for purposes of instructed action, across contexts as different as an obstetric examination on one hand, a violin lesson on the other. As in all cases of demonstration, this requires selective attention to just those elements that are to be taken as relevant – in this case the instructing body's comportment, and the perceived understanding of the body being instructed. The centrality of embodied demonstration in instructed action is itself a reminder of the irreducibly corporeal constituents of both learning and interaction. Moreover, the contingency of instructed action and the modes of engagement that implies are evident in all of the ways in which "a model body does not determine the body movement modeled upon it; rather, a model and a modeled movement mutually elaborate each other" (Nishizaka, this issue, p. X).

Remembering Ueno's work in the context of this special issue reminds me of how many interconnections there were in the ideas that have inspired us and the projects to which we are committed, shared by many readers of this journal as well. These include interactional analyses of the situated production of social order inspired by ethnomethodology and conversation analysis; an appreciation for the mutual constitution of human and other than human agencies informed by science and technology studies; the intimate connections and enacted differences between reproduction and transformation; and the problems of representation in design, as well as emerging possibilities for more collective and wide ranging design projects. Ueno's great gift was to bring these lines of interest together both in his own life and work, and in the enthusiasm with which he conveyed their generative power to his colleagues and students.

## References

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