

Interrupting invisibilities, bridging worlds

An essay on the work of turkopticon.differenceengines.com

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What kind of world is this? What sorts of entities exist here, and with what kind of relationality? What are the practices here? A cost-benefit analysis takes a given technology and tries to assess the costs and benefits; it doesn't question the conditions of existence of the life world itself.

—Donna Haraway in conversation with Lisa Nakamura

AMAZON MECHANICAL TURK works by keeping worlds apart. Mechanical Turk is a web-based labor market that draws workers scattered all over the world to perform small bits of digital labor for a few dollars an hour (Ross et al. 2010). Amazon's engineers and managers designed the system to make up for the failure of artificial intelligence to fully automate their data processing tasks. Failing to replace low-status workers with machines, Amazon sought to simulate machines with hidden, globally distributed, contingent low-status workers. From outside, the technologists and researchers who work "through" Mechanical Turk see the system as a humming, smoothly functioning infrastructure (e.g., Irani 2012; on infrastructure see Star and Ruhleder 1996; Star 1999). This impression is maintained by organizing—enframing—workers for the pleasure of technologists. The system's smooth functioning—employers' ability to extract cheap, or, if they like, free, labor from workers—relies on keeping workers isolated: from employers, from journalists, from one another, from the administrators of the system itself. "Requesters" (Amazon's term for employers) write code to delegate information work to the "crowd" of workers, which is figured and organized as technological—computational—rather than human infrastructure: in Amazon's cheeky but truthful tagline for Mechanical Turk, as "artificial artificial intelligence." Workers do not see their employers, the projects they contribute to, or one another, and cannot be found by journalists, labor organizers, or watchdogs.

Turkopticon creates a short circuit between these worlds. With the tool, workers call their employers to account and engage in mutual aid. Turkopticon offers a forum and format for workers to review employers and to see others' reviews while browsing Mechanical Turk for work. Unfavorable reviews on Turkopticon have prompted more than a few employers to wonder why their tasks are not being completed—and eventually, to engage with workers through Turkopticon and other online venues. We have maintained Turkopticon for four years; around 13,000 users have downloaded the browser add-ons since we revised them in August 2012. The website that lets people post and browse employer reviews receives about 50,000 visits a month. About 17,500 people have signed up since 2008. At time of writing,

Turkopticon had hosted reviews on the vast majority of employers in the system. We've grafted ourselves into Amazon's infrastructure.

From our standpoint as Turkopticon builders, we "intervene" in the scientific discourse on "human computation" (Silberman et al. 2010a, 2010b). Computer scientists tend to figure workers either as rational self-interest maximizers or as computing machines without needs, desires, or rights. Turkopticon gives concrete voice to the persistently problematic residual of rational-actor models of economic and social life that still dominate the thin and perhaps overly "pragmatic" economic and moral discourse of high technology industries.

In these models, two parties who transact freely must do so because it makes both better off—and all parties are assumed to transact freely. But how did computer technologists arrive at a configuration in which a worker is better off spending 30 minutes on a menial information task for which they may or may not be paid, under a labor regime in which they have no rights, no recourse to arbitration in case of nonpayment, and no guarantee that the employer or a system administrator will even read their complaints, than to look for other work? What happened before the transaction, in the design of Mechanical Turk itself? In the slow emergence of a libertarian imaginary in the technology industry? In the erosion of the American welfare state? Such questions are largely outside technology discourse, but need not be.

We delivered a talk about Turkopticon at the premier meeting of the human-computer interaction research community (Irani and Silberman 2013) to hundreds of computer scientists. This created an opening for others—some computer scientists and industry researchers—to express their discomfort with contemporary "crowdsourcing" arrangements at the microphone and in the hallways. We present at crowdsourcing industry meetups, standing in the same room as, indeed smiling at, the executives in charge of Mechanical Turk; we find allies among crowdsourcing startup founders in San Francisco and full-time crowdworkers in rusted-out midwestern cities. By publishing in technology research venues and maintaining a working technological system, our work at first seems legible to the community we critique; the work then unfolds in unfamiliar, jarring, disobedient directions, forcing new terms into the world of technology research.

To bridge these worlds—between workers and employers, between the libertarian discourses of the technology industry and the ethical visions of other traditions, between research and activism—we have, like many others, become hybrid. Our original training was in computer science and engineering; we have branched out to study, to rely on and be motivated by, feminist theory and social theory broadly; we think "ecologically," keeping the scope of analysis open where engineers often cut. We have become institutionally hybrid; while we have fed our

bellies mostly by the graces of the academy, for two years the maintenance of Turkopticon was supported in part by a quasi-fictional “Bureau of Economic Interpretation”—sleeping on rooftops while attending major computing conferences in American urban centers. We have been engineer and theorist, academic and activist, nomad and lab rat, peacemaker and provocateur, margin and center.

If our interventions have an ancient mascot, it might not be Prometheus, but rather Coyote (Haraway 1991b:199-201; Grassie 1996; Hyde 2010). When a system becomes too orderly, these transcategorical figures appear, and their transaction across boundaries transfigures those boundaries. We should not mistake “intervention” as an act taken from above, below, or otherwise outside—from a pure position with pure intentions and pure methods. Coyote is a messenger, always between; Coyote “is the spirit of the road at dusk, the one that runs from one town to another and belongs to neither” (Hyde 2010:6). In the early days of Turkopticon, we used a personal connection with a prolific requester to spread the word about our service. For Coyote there is no outside, no purity, no starting over with the ground swept clean, no unimpeachable subject position, unassailable argument, or finally decisive tactic. When we take up this mode of action we act not from an outside, or even on something outside ourselves, but rather enact what we might call *situated reconfigurations* (to mesh terms from Haraway (1991b), Barad (2003, 2007), and Suchman (2006)) in constantly shifting material-semiotic assemblages (see Bennett 2005, 2010; Law 2009). Coyote unsettles the existing order not by fighting it on its own terms but by acting in ways that challenge the legitimacy of its categories; by changing the variables salient to the operation of the dynamical system (cf. Kauffman 2002); by changing, in short, the rules of the game (cf. Carse 1986). Coyote’s interventions expand “the adjacent possible” (Kauffman 2002); they “multiply possible worlds” (Callon 2007). Yet despite bridging the worlds—in the mythology, the worlds of gods, humans, machines, animals—Coyote is always particular, embodied, finite; Coyote always has a belly to feed (Hyde 2010).

For four years, Turkopticon has helped disrupt the invisibility, isolation, and silence of Amazon’s distributed workforce. It has altered the balance of power between workers and employers. It has also stood as a public object bearing witness to worker unease—witnessing carried further by the journalists who have used Turkopticon as a starting point to push these labor questions out (e.g., Cushing 2012; Hodson 2013; Reynolds 2013) and the other researchers (one of whom now works for the Department of Labor) who have built on our work (e.g., Felstiner 2011; Bederson and Quinn 2011; Kittur et al. 2013).

What now? Our web service has grown slow as it has grown popular. Workers want new features and we often fail to deliver. We have become part of the taken-for-granted machinery “around” Mechanical Turk (see Irani and Silberman 2013:

619). The categories are starting to ossify, in the database and in the discourse. When asked why they don't fix their broken system, the executives, pointing among others to us, say that "the community" handles the problems. Turkopticon began as a gesture, but like any organism in a coevolving system we have to run as fast as we can just to stay in the same place.

We have not called ourselves artists; we have not needed to. In our work we have found maintenance—of social relationships and computer code alike—to be as essential as intervention or (that term celebrated so widely it risks becoming emptied of meaning) "innovation." But we might ask if the spirit of intervention today—in art, in activism, in creative research—is embodied precisely in the act of imagining and making possible "otherwise," of expanding the "adjacent possible" (Kauffman 2002), of "multiply[ing] possible worlds" (Callon 2007). Our agency is never unbounded, but to the extent that it "slips the trap" (Hyde 2010) of the channels carved out for it by existing institutions, infrastructures, norms, and practices, the "difference that makes a difference" lies in the development and exercise of the disobedient imagination. Opportunities for this exercise never fail to turn up. As Goodman wrote of anarchism (1966), the relativity of critical and creative practice to the actual situation is part of its essence; like the anarchists, like Coyote, "we are not in charge of the world"—"we just live here and try to strike up non-innocent conversations..." (Haraway 1991).

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