

A hand is holding a custom-built electronic device. The device is housed in a grey, textured plastic casing. It features a circular gauge with a needle and scale on the left side, a circular speaker grille on the top right, and another gauge below the first one. A small screen or display is visible in the center. Below the main casing, a white punchcard is attached, with a hand pointing to it. The punchcard has a grid of holes and some handwritten text, including the word "Arad".

## PALETTES, PUNCHCARDS AND POLITICS: Beyond practicality and hedonism

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Garnet Hertz<sup>1</sup> and Rachel Maines<sup>2</sup> have made a useful distinction between "hacking for survival" and "hacking for hedonism": two contexts of DIY practice that at first glance appear to occupy opposing ends of a hacking spectrum. If we imagine extreme versions of this binary, we get survival oriented hacks on the one hand – William Kamkwamba hacking together a windmill to provide electricity to his village in Malawi<sup>3</sup> – and we get hacking and appropriation primarily as a leisure activity on the other hand – James May enlisting volunteers and artists to build him a house out of legos<sup>4</sup> (that is subsequently demolished when a permanent home cannot be found for it). Our initial impulse was to write about these contexts for making from two very different perspectives within our own communities of practice: Amanda would look at hacking for survival in the context of Thai Street Hacks, while Josh would consider hacking for hedonism from the perspective of the Steampunk making community. However, as our conversation about these practices evolved it became evident that we were not actually working with a binary opposition (survival vs. hedonism) but instead that hacking and DIY practice in both of our communities was driven by a more heterogeneous set of motivations, environmental pressures, and opportunities.

Instead of claiming that these are *types* of DIY practice, we'd argue that both survival and hedonism are *characteristics of all* DIY practice, albeit differently emphasized in different projects and different situations. To these we would add that *politics* is also a unifying property of DIY practice. While hacking might be predominantly motivated by any one of these concerns, it is clear to us that even in contexts of hedonism, DIY practitioners are addressing legitimate local needs, and even the most pragmatic of hacks are not divorced from a sense of playfulness with materials and technology. In both contexts, it is important to recognize

<sup>1</sup> Hertz, Garnet. 2011. Arduino Microcontrollers and The Queen's Hamlet: Utilitarian and Hedonized DIY Practices in Contemporary Electronic Culture. Proceedings of the 31<sup>st</sup> Annual Conference of the Association for Computer Aided Design in Architecture (ACADIA).

<sup>2</sup> Maines, Rachel. 2009. Hedonizing Technologies: Paths to Pleasure in Hobbies and Leisure. The Johns Hopkins University Press.

<sup>3</sup><http://movingwindmills.org/>

<sup>4</sup><http://news.bbc.co.uk/2/hi/8269479.stm>

how hacking is both implicitly and explicitly a political act, positioned in relationship to authority as encoded within the social and industrial institutions that govern access to material goods and intellectual property.

The more we looked at Thai street hacks, the more evident it became that they most certainly had an element of fun to them. This is highlighted most famously in the "Thai Flood Hacks" that proliferated during the massive floods of Fall 2011<sup>5</sup>. Though a tragic event that killed hundreds and left many thousands more out of work, the makeshift boats, pet life preservers, and elevated vehicles revealed a sense of whimsy even in coping with a natural disaster. An eminently practical project from the King Mongkut Institute of Technology – a floating device meant to save

lives by detecting current from submerged electronic devices – was topped with an adorable rubber duck. Because they could. More routine examples of Thai DIY include the many small businesses that unlock mobile phones for a small fee, craftspeople who make miniature tuk-tuks out of beer cans and sell them to tourists, or the independent carpenters near Bangkok's port who make tables and chairs out of discarded shipping pallettes. Such hackery is, of course, paying work that allows these entrepreneurs to survive, but it's also (and this is actually



Figure 1: Flood ducks, a project from the King Mongkut Institute of Technology, detect dangerous electrical currents in flooded homes.

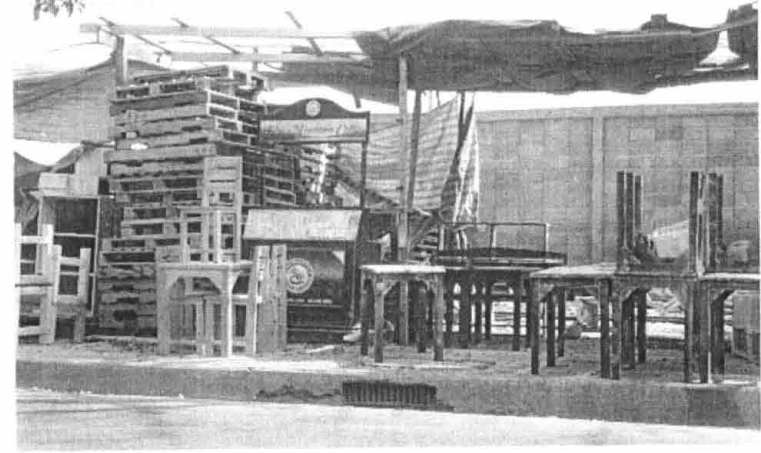


Figure 2: Furniture made in the port of Khlong Toey, Bangkok, from discarded shipping pallettes.

really important), a way for them to earn a living in a way that lets them control their schedule, express creativity, and maintain a sense of dignity. More deeply than that, it embodies a tradition of work that intrinsically includes elements of "sanuk" (fun) and sociality.

Similarly, although Steampunk making is primarily characterized by a drive to re-imagine modern technology through a historical lens, this fundamentally playful practice often undertakes more serious cultural criticism by connecting anachronistic historical revisionism with a science fictional ethos about the nature of technology.<sup>6</sup> Steampunk practice is a highly politicized form of DIY that is explicitly motivated by a desire to reclaim technology from the homogenizing forces of mass production. As such, even the most seemingly frivolous window dressing of the Steampunk aesthetic participates in a culture of critical

<sup>6</sup> See Onion, R. (2008). Reclaiming the Machine: An Introductory Look at Steampunk in Everyday Practice. *The Journal of Neo-Victorian Studies*, 1(1), 138-163 for a much more rigorous discussion of the ways in which Steampunk practices critically engage the relationship between people and technology.

<sup>5</sup> A few sources (among many):  
<http://mkshft.org/2011/11/thai-flood-hacks/>  
<http://www.neatorama.com/2011/11/15/thai-flood-hacks/>  
<http://slashbangkok.com/>  
<http://news.asiaone.com/News/Latest%2BNews/Asia/Story/A1Story20111106-308991.html>

design. Unlike other DIY practice where the critique of industrial processes is often implied but unarticulated, Steampunk often explicitly declares itself as a critical practice: hence the "punk" appellation.

For the moment, then, let's unmake the dichotomy between survival and hedonism, or at least consider the work that it takes to separate joy and necessity, work and play, production and consumption. These learned distinctions come easily to someone who spends their life in an industrial society, and who takes wage-work for others as part of the natural order of things. For people who live in economies with a significant "pre-industrial" sector, those distinctions are not quite so naturalized. The Thai noun for "work", *ngan*, is also used for "festival", and can be traced back to a time when the two concepts were much more synonymous. This reflects a tradition of work that is concerned with communal effort and sociality. Today, agricultural work in Thailand is still characterized by a vibrant sociality and loose schedule (and, no doubt about it, hard physical labor), while "modern" jobs are more about disciplining workers' bodies and hiding their individuality<sup>7</sup>. Workers who take service jobs in the city *can* adjust to the dualism of work and play (especially given financial incentives), but that doesn't mean they perceive it as natural, that they like it, or that they can't conceive of alternative configurations. In fact the *separation* of work and play here is what's remarkable, in contrast to a North American attitude which finds "productive leisure" to be remarkable because it appears to constitute a contradiction in terms.

Thailand's craft-based entrepreneurs also show us that the distinction between "practical" and "strategic" interests is often problematic<sup>8</sup>. "Survival" and "political" strategies can be performed simultaneously – to think otherwise is to believe that poor people don't care about constructing their own identities, or that they don't think critically about the world that they live in. For the poor and the politically disempowered, open resistance can be dangerous, but that doesn't

<sup>7</sup> See Brody, Alyson. 2006. The Cleaners You Aren't Meant to See: Order, Hygiene and Everyday Politics in a Bangkok Shopping Mall. *Antipode* 38:3, pp 534-556 to learn a bit about how much work goes into making work separate from play and sociality.

<sup>8</sup> See Escobar, Arturo. 2011. *Encountering Development: The Making and Unmaking of the Third World*. Princeton University Press. p187, and Brody, *ibid.*

mean that their consciousness and imaginations have been so completely colonized<sup>9</sup>. Woven through everyday survival strategies are under-the-radar practices of resistance and redefinition, small ways to preserve dignity.

So how does this relate to North-American, "hedonistic" practices? Well, how empowered are we, *really*? Discourse within the Steampunk community frequently addresses issues of empowerment and agency over (and through) technology. Reacting against the "hegemonic grip of modern design"<sup>10</sup> Steampunk practitioners hack and appropriate modern technologies (such as cell phones and personal computers) to fit their own needs.

"The authoritarian implications of the 'black box' are precisely the ones that Steampunk practitioners seek to undermine through their craft practices. Steampunks see modern technology as offensively impermeable to the everyday person, and desire to return to an age when, they believe, machines were visible, human, fallible, and, above all, accessible." (Onion, 2008, p.145)

Steampunk can be seen as a microcosm of broader DIY motivations; one which employs a narrative of human-machine relations to articulate a desired future. Unlike many "punk" movements, Steampunk adopts a decidedly utopian position on this future, enacting its politics through a design practice that celebrates the technological sublime<sup>11</sup>.

DIY practice is political, and yet it is always, also, at the same time, about other things, too. As a corollary to the relationship between practicality and politics<sup>12</sup> we'd suggest that "hedonistic" and "political" activities can also be one and the same. Whether it's North American steampunks or Thai entrepreneurs, DIY as political resistance is actually pretty similar

<sup>9</sup> Scott, James C. 1985. *Weapons of the Weak: Everyday Forms of Peasant Resistance*. Yale University Press.

<sup>10</sup> Onion 2008.

<sup>11</sup> (Onion 2008) describes Steampunk's fascination with technology in terms of the "sublime": an experience of aesthetic awe at the scale and/or intricacy of a given technological artifact.

<sup>12</sup> As discussed in Escobar 2011.

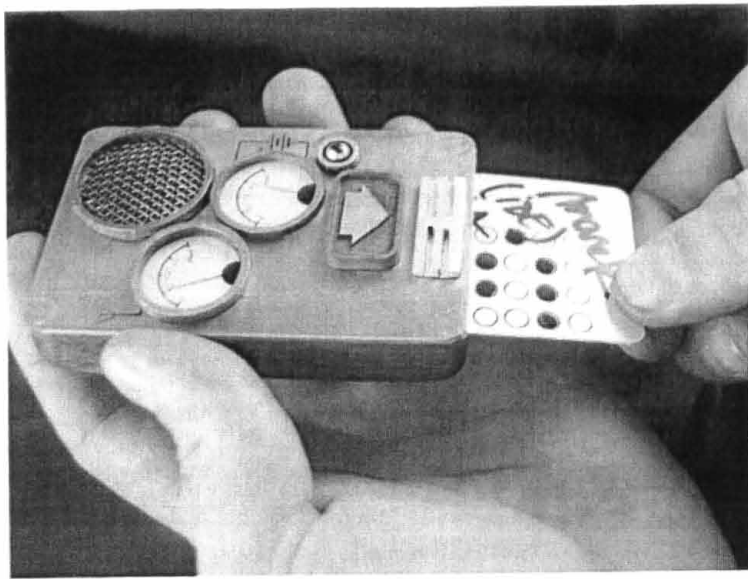


Figure 3: Arthur Schmitt's Steampunk Phone is controlled by binary encoded punchcards. (Image source: <http://www.tart2000.com/2007/07/steampunk-phone/>)

to everyday forms of peasant resistance<sup>13</sup>: decentralized and unorganized practices that mostly happen below the policy radar, and yet affect the success of state policies. This sort of resistance takes the form of desertion rather than conscientious objection, working inefficiently rather than striking, squatting rather than invading. Many practices of making can be considered a sort of "everyday resistance", not just to a consumerist culture but also to a political system increasingly controlled by corporate interests and difficult for normal people to influence directly. The Occupy movement resists this trend overtly: they get arrested, pepper-sprayed, and beaten up, but the Supreme Court's Citizens United decision still stands. In contrast, while DIY has intrinsically political elements, it can also fly under the radar because we can always play up plausible deniability. What, me, political?

<sup>13</sup> As described in Scott 1985, based on fieldwork subsistence farmers in rural Southeast Asia.

Maybe I just like cute robotic dogs<sup>14</sup>. Regardless of the context in which it occurs, DIY practice creates a safe space for people to challenge entrenched political and economic structures. Although this plays out in different ways in different communities, hacking serves a fundamentally liberating function, giving people a greater degree of autonomy, and consequently a greater amount of responsibility over their environment at the level of immediate and local needs. A quiet (or even exuberant) abandonment or reappropriation of black-boxed, cookie-cutter consumer products is a much safer method of resistance to corporate interests than joining an Occupy rally, just as a conscript's quiet desertion is safer than trying to overthrow officers, and failing to declare cash income is safer than challenging the state's right to tax you at all. And yet, sometimes, these not-entirely-organized acts, in aggregate, can render existing policies ineffective and maybe even inspire new ones.

<sup>14</sup> Natalie Jeremijenko's Feral Robotic Dogs, while a noteworthy and effective tool for citizens to track environmental pollution, is also adorable, and deliberately calls up humorous images of a "robot army". <http://www.nyu.edu/projects/xdesign/feralrobots/>



Figure 4 Richard Nagy's now infamous Steampunk Laptop. (Image source: <http://www.datamancer.net/steampunklaptop/steampunklaptop.htm>)