

1 Artistic Operating Systems

Digital Slöjd

Brendan Howell

The subject, here writing somewhat awkwardly, in the third person, has spent much time creating various interactive artworks and inventions as well as related, more remunerative projects. Accomplishments in the domains of cycling, romance and home economics are not covered here as they are of limited, if any, interest to a more general public. However, readers seeking information on those topics are advised to inquire directly, preferably in the context of a nice meal or stroll in the park. The author of this bio lives in Berlin, Germany but can often be found walking in wooded areas of Northern Europe or enjoying pastoral life in Hacksneck, Virginia, USA, with his extended family.
<https://wintermute.org>

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(T.C.) You say that smartphones are “bad at everything”. Could you elaborate on what they’re especially bad at and why? A lot of us have made the experience of trying to keep a “dumb” phone, and it turned out very difficult, not to say impossible in most cases. How come? What makes smartphones so unavoidable these days, regardless of their inherent lameness?

(B.H.) Well, if you allow me to take a step back, we might begin by asking what the function of a smartphone is? There is the famous modernist design convention that “form follows function”. When the iPhone was first introduced, there were almost no apps and there was not even an App Store where you could get new software. It didn’t do much that the other phones couldn’t do. But it was very new and shiny, very “on-brand” product that appealed to gadget-loving, wealthy consumers who wanted a new status symbol. Apple had recovered from a low period in the 1990s to become hugely successful in the 2000s but most of their profits were not from computers but instead from selling iPod music players which were big with young consumers. By 2007, the iPods were fading in popularity especially as mobile phones started to support storing and playing music. Apple needed a new thing that would bring in sales. So I would argue that the function of the iPhone is marketing—it is designed to be shiny, mysterious, expensive and with its large screen, provide an endless supply of attractive novelty. And in this function as a marketing device, it has performed unquestionably well.

But the first iPhone was awkward to hold. Without buttons, input was very difficult (especially text). The huge screen, CPU and fancy effects drain the battery very quickly—about ten times as fast as a traditional feature phone. It is expensive and easy to break—so much so that most people immediately buy a plastic protective outer case for their new phones. These are pretty basic functions that one would think were important for a quality product, especially one that was famous for “design”. In some ways more recent phones have made things even worse by pushing the screen to the limits of the case, forcing the speaker and microphone to the edges of the device.

Instead of fixing these problems and adapting them to human needs, people have been forced to change their lives and environment to

deal with these limitations. They glue big knobs to the back of the phones to get a decent grip. They adopt strange postures, holding the phone like a slice of plastic pizza, alternately speaking and listening to the end. We use complex, unreliable statistical methods like auto-complete and speech transcription just to get a few lines of text into the machine. Most interfaces are reduced to a single scrolling column with a few big buttons, operable with a single finger. We claim to be “mobile” but we carry chargers, external batteries and cables everywhere we go and constantly search for places to plug in for a few desperate minutes. The new city buses in Berlin even have USB power plugs on every seat. You might say this is all just to accommodate the design failures of Apple and their imitators.

Using a “dumb phone” can be difficult but that is because we are increasingly living in societies that are based on the assumption that every social act should be mediated by Apple or Google (or some other Big Tech entity). So I would say that there are two factors that make using a “dumb phone” challenging.

The first is that we have adopted a culture of compliance which does not really allow for any alternatives. I think you could compare using a “dumb phone” today to trying to ride a bicycle in a city or suburban area that has been completely adapted to a car culture. It can be very frustrating, alienating and provoke angry responses from mainstream users who are not ready to accept non-conformity.

The second reason it’s hard to use a “dumb phone” is that our imagination for other ways of conducting our everyday life have been dulled. Just a dozen years ago, most people did not have maps on their phones. Somehow, we all managed to make our way to work, school, home and even travel around the world without Google Maps telling us when and where to turn. The cities were not filled with lost zombies, wandering aimlessly. We had myriad strategies and ways of knowing (or asking!) and finding out where to go. But now many people find it absolutely inconceivable to leave the house without holding their phone telling them where to go. It’s a habit that is very hard to break and those now accustomed to it, after years of conditioning, understandably, find it very difficult to suddenly develop the flexibility needed to navigate without a phone. It’s hard and it will

take some effort to (re-)learn other ways of operating! But I would argue it's also very fun, interesting and healthy to try.

(T.C.) With The Screenless Office,¹ you made some basic computer interactions, like browsing the internet, entirely screenless and paper-based. Instead of a screen, you rely on a barcode scanner to give commands, running through a homemade Python program, and a laser printer as output device. That is, to escape the standardization of digital interfaces and the addiction to devices, especially smartphones. A lot of different criticisms have been addressed to new technologies, and we find interesting that yours focus on the media screen itself. Moreover, that you felt the need of fully escaping it, and managed to bring computers back to screenless where they started. Do you think screens are inherently wrong devices? And if so, why?

(B.H.) I'm going to make perhaps a slightly scandalous comparison and suggest that it might be helpful see screens as something similar to psychoactive drugs or intense religious experiences. I'm not at all opposed to drugs or religious trance states but I think most people would agree that they should at least be treated with a great degree of respect and restraint if not general abstinence.

I love film, especially on a big screen. I also appreciate that there are certain forms of interactive work that are extremely tedious or indeed, almost physically impossible without having the direct feedback of a display screen. These are special, specific cases, not things we generally need or want to do for hours on end, every single day. Instead, we might consider reserving screens and using them only on special, infrequent occasions.

I would argue that in terms of human evolution, screens are a phenomenon that we are not at all prepared to confront. They mesmerize us. They put us into a mental state where we ignore our immediate surroundings to focus exclusively on the world on the other side of the screen. They keep us fixated by promising a continuous but inconsistent flow of new information, short-circuiting our instinctual vigilance. They make distant events seem close and more important. The artificial light disrupts our sense of time and daily rhythm. And when they are connected to the internet, the flow of stimuli

never ends. Essentially, they can consume all of our attention, which is a limited and very precious resource.

So I don't put a kind of value judgment on screens as being "bad" or "wrong" but I would instead qualify them by saying that they are extremely powerful and as such potentially very harmful and addictive if we can't find ways to constrain our use of them.

(T.C.) You insist of the fact that The Screenless Office was never meant to bring any "solution" to problems arising with the digital, but existed only as a personal practice, tied to personal need and use. What does it take to keep a diversity of digital practices alive? Why should standardization of uses and tools be avoided in your opinion?

(B.H.) There are many good reasons both practical and aesthetic to support a diversity of technical methods and means.

Pragmatically speaking, having a diversity of practices, much like biodiversity, enables us to have systems that are more resilient and flexible in the face of threats and change. If we all use the exact same systems, then things like computer viruses/Trojans/worms, supply chain problems, hacking attacks or systemic crashes are all much worse because there is a single common point of failure. On a less dramatic level, having diverse tools means that creative users are more likely to find a way to solve unusual problems by exploring different ideas and approaches rather than limiting themselves to ill-suited standardized solutions.

But for me personally, there is a hugely important argument to be made for diversity in terms of aesthetics. A world where everything looks the same is stultifying and alienating. And it acts as a steamroller of culture. The culture of suburban, consumerist, West-Coast (mostly pale, mostly male) Americans becomes the standardized look and feel of everyday life for the entire globe! Some people may be OK with that but I think most of us would like to feel that our objects and mundane actions reflect our region, natural environment, ethnic identities, subcultures, genders, sexualities,... all the way to our individual personalities. It's messy, but only by embracing diversity can we hope to avoid suppressing so much of our social and individual character.

As for what it takes to maintain a diversity, I think the first step is to try to recognize and

accommodate a spectrum of practices and to be willing to not just tolerate but sometimes celebrate the surprising, personal ways that people have of working with computers. And while our discipline is rather young, compared to other arts, we might try to maintain some of the more marginal practices as a kind of tradition. Ideally, computing and interface cultures might have some of the sense openness that we apply to diversity in say food, music or architecture.

(T.C.) It feels like your work has a lot to do with time and attention. In *The Screenless Office*—that makes printing a condition to browsing websites—the time you actually need to access information is not reduced but extended, on purpose. You willingly step out of the race to instant access that all web-based technologies are involved in, introducing breaks and waiting in the very process of reaching information. How do time and effort change the way you receive, the way you process that information? What would be wrong with immediate access?

(B.H.) I would say there are two main problems with immediate (and essentially infinite) access to information.

The first issue is that we are then able to collect information much faster than we can consume it. Many of us have the experience of crashing a browser or even a whole PC by having too many open tabs. Our appetite for new information, which was historically scarce in nature, is easily aroused and so we may often find ourselves clicking on a link, opening a new tab before we've had time to even read, let alone ponder, the page we are currently reading. It's so easy that we can just do it on an impulse, tapping and clicking away and don't realize until we pause and suddenly feel overwhelmed.

The second problem with instantaneous access is that our sense of value is often tied to how difficult it was to find something. If we get it without much effort, we assume it can't be worth much. And this can lead to a sense of trivialization of all content. Informative, personal, meaningful and insightful pages end up being dumped into the same worthless stream of stuff with trivia, rumors, titillation and spite.

So by having an inherently slower interface, we have time to think and in the process we are more aware of the limits and the value of our time. If you have to wait, you are more likely to

pick something that seems more edifying. And when you spend a bit of time operating like this you understand that it's a different temporality which can be quite liberating.

(T.C.) In your presentation at the Tangible Cloud first session, you introduced the term digital slöjd. Could you please explain this concept? Why did you get interested in slöjd?

(B.H.) The word slöjd goes back to an old Norse word slög which meant something like "artful", "ingenious" or "cunning". The English word sly has the same root. In a modern context, slöjd is (in other orthographies Sløyd or Sløjd) the general word for crafts in Nordic languages. And in the late nineteenth century, some educational reformers proposed a formal curriculum for schools to help students develop basic manual skills and a broader sense of self-sufficiency. In contemporary schools it's actually a required subject in Norway, Finland, Sweden and Denmark. Kids learn both hand-tool woodworking and textile techniques.

But I got interested in it when trying to learn about traditional ways of working wood. I wanted to get to know the trees in my neighborhood and at the same time I was attracted to the idea that I could make useful things for my home using a few simple tools. It felt like a kind of antidote to disposable, abstracted material cultures. Instead of buying short-lived plastic, you can make things from free materials, branches and bits of small trees, found in our immediate environment. Although, one can be very traditional about the whole thing sticking to classical styles and patterns, there's also a huge amount of room for expression and adapting to your own needs and desires.

And so it started me thinking about the idea that there could be a kind of digital slöjd that could involve a similar ethos. It would combine simple general purpose tools, easily maintained and long lasting with sustainable everyday, (ideally local and natural) materials. At this point it's more of a provocation and a thought experiment, but I think if we can make it more of a real community of practice (and not just a kind of speculative fantasy) it could, bit-by-bit, shed away some of the more destructive and oppressive mechanisms in our lives.

¹ *The Screenless Office*, Brendan Howell, Program (Python), [date]. See: <http://screenl.es>.



Figure 1.1 The Screenless Office, Brendan Howell, A Printed custom newspaper, 2020

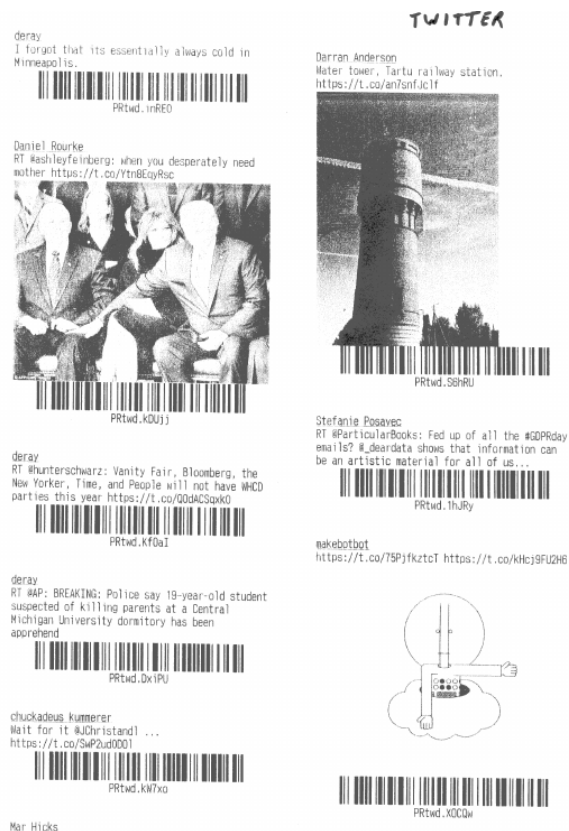


Figure 1.2 The Screenless Office, Brendan Howell, Twitter feed on receipt paper, [date]

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