Stay alert to the toolification of experience.

The technocratic shift is here.

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This paper, written during lockdown while involved in remote teaching, looks at the impact of platform technologies to reflect on how human agency has been machine-reconfigured in the name of efficiency. It posits that a technocratic shift operates by capturing the messy flow of embodied experience, turning it into an operational and constantly upgradable toolkit, and asks for a consideration of the implications of this process of "toolification", especially in the context of creative studio practice.

The new normal

If this state of emergency turns out to be our (indefinitely stretched out) new normal (a quick Google search for "coronavirus the new normal" already returns over 2 billion entries), maintaining a critical view of technology is more crucial than ever.

Why? Because, for many, the state of emergency trumps critique — of any kind.

We have been buckling down, learning new digital tools, adapting our working ways to commercial platforms — MS Teams, Collaborate Ultra and, in our off-time, Zoom or Houseparty. Our resilience astonishes us and strengthens further our individual and collective resolve to make it all work. Our new platform-based interaction capacity feels almost second nature already, almost empowering, almost 'just right' and, frankly, so convenient. Travelling to a meeting seems an unproductive, even pointless, thing to do now, or in the future.

The shift to online mode in educational environments has happened very fast, as is appropriate to an emergency response. We should, however, be mindful of how we frame this shift: not quite as online learning, better as emergency remote teaching — for lack of better words (Hodges et al., 2020). It would be a mistake to treat this shift as a mere technical problem to solve through technical means. No matter how sophisticated the platform, intuitive the interface or superb the usability, these are not just technical matters.

Technologies are never neutral. They are situated, generative, persuasive enactors of realities — including reality's unequal power distribution, injustices and social conflicts reflected in their own unequal sovereignty layout. Far from being neutral enablers, or benign reflections of what we do, technologies mediate, orient and shape our behaviours and practices, as educators, citizens and humans. Technologies are not just tools. They build the social. They co-design it.

For any behaviour, any practice, any cognitive, sensorial and affective capacity that a platform-based environment affords (hello MS Teams), there is an equal number of behaviours and practices, and cognitive, sensorial and affective capacities that are denied, sidelined or devalued because they do not fit the interface strategy, the 'choice architecture', the usability narrative and do not comply with the standardisation of behaviour expected of us.

As we found ourselves with no choice but, fundamentally, to become users of — and used by — a complex of networked, interlocked and stacked digital infrastructures, this process is turning the flow of our real-lived experience into an operational toolkit that feeds information to machines recursively. We must stay alert to what this process is doing to us.

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It would be apt to remember that, in the late 1930s, in his "Manifesto of Machinism", Italian designer extraordinaire Bruno Munari was already writing about humans becoming "machines' little slaves" (Munari, 1937). I call this process a "toolification of experience" that is happening to us through the platform-driven technocratic shift (figure 1).

→ Figure 1. Newly established Bonus Bureau's Computing Division employees use 'state of the art' calculating machines. (US, 1924) — Bridgeman Education.

The technocratic shift

Technocratic logic is rooted in technical theories about efficiency, measurement of performance and calculability. The problem it answers is: How do we make the system more efficient?

Technocracy is a form of governmental rationality, a regime informed by the ostensibly neutral and objective knowledge provided by technical expertise. Technocracy claims no allegiance but to efficiency. It traverses nation states, governments, corporations, educational institutions, mindsets.
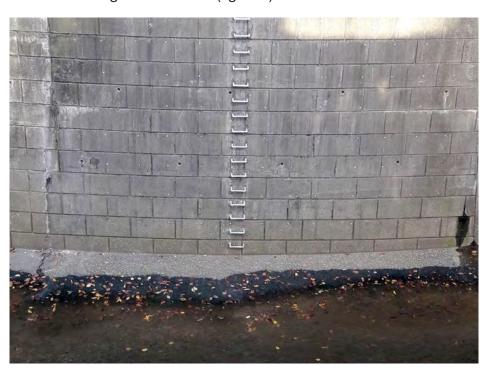
It is informed by a specific understanding of technology and how technology intersects governance, policymaking and the management of risk and performance (Esmark, 2020). Above all, a technocratic logic is based on three ideas concerning technology: 'Instrumentalism' — technology is a means to an end. If it works, it must be good. 'Solutionism' — technology can, will and should deliver solutions to problems. 'Techno-determinism' — the progress of technology is natural, rational, positive and inevitable.

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The implication of this instrumentalist, solutionist and techno-determinist view (technocratic logic) shapes not only how we see technologies, but also how we relate to the world of material entanglements we live in. Technocratic logic reduces any discussion around technology to the disingenuous common sense of "Guns don't kill people, people kill people" — the notorious argument that technologies are tools; it only depends how they are used (Feenberg, 2018). Moreover, it frames technology as the harbinger of future achievements, often equating it 'tout court' with 'the future' (chosen by whom, for whom, to whose advantage or detriment often left unsaid). Finally, it deploys its promise of improved performance and measurable results in order to claim to be beyond the political.

A true technocrat will always say that politics must be kept out, if what is at stake is solving a problem.

Technocratic logic is value-free (figure 2).

→ **Figure 2. Photo: Betti Marenko. Tokyo, 2020.**

Toolification

There is nothing wrong with having the right tools for the job. Tools are after all what make us human and how we humans have learned to interact with the planet. The mistake would be to believe that we invented tools to master the world. The truth is that it is tools that invent the human. Actually, tools and humans co-produce each other (Colomina and Wigley, 2016). The idea that we invent, design and use tools that are tailored to our specific needs and requirements fails to take into account how everything we humans create goes on creating, producing, designing — all the while generating largely unexpected consequences. The tendency to see technology as nothing but pure instrumentality — the technical toolkit — is a fallacy (Simondon, 2011).

This is why it is essential not to confuse technologies with tools (nor with methods) (Tenen, 2016). Likewise, it is advisable to avoid the normalisation of our reliance on tools and the standardisation of behaviour that tools 'expect' from us (Scranton, 1995). Instead, we must stay alert and resist the toolification of experience.

Our direct experience — the experience we constantly have of the world we inhabit, which is constitutive of what and who we are — is a finely tuned blend of the cognitive, the sensorial, the affective, the embodied, the material-semiotic and the non-cognitive.

It is this complex, non-linear, even messy, chaotic, ex-centric experiential apprehension of the world that is turned into workable tools by the technocratic logic of a platform. This logic is enacted through environments designed to be highly intuitive, with the ultimate goal of becoming invisible. This is not new, of course. It was spelled out 30 years ago by the pioneers of ubiquitous computing: the more technologies are woven seamlessly into the fabric of everyday life, the more they go unnoticed (Weiser, 1991).

And so, we buckle down and learn the platforms. We get to know them. We familiarise ourselves and adapt to them continuously, down to my body posture right now, the correct one that the assemblage human–screen demands. We adjust to the machine. Toolification shifts tremendous responsibility onto us directly, and our willingness to retrain, to develop competence and upgrade it when needed, to make it work.

Every time we log in to a platform, not only are we users, we are products too.

Platform design (interface, interaction, UX) is a way of designing intentions, propensities and desire pathways at a precognitive level, in ways that remain not fully accessible to conscious cognition and perceptual awareness. This is where platform design encounters persuasion techniques and behaviorist units (Fogg 2003). And this is also where data harvesting, predictive analytics, pervasive surveillance and algorithmic control happen (Klein 2020).

The technocratic shift is here (figure 3).

→ Figure 3. Photo:
Betti Marenko.
London, 2019

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Scalability

The rhetoric of quick, easy and simple-to-use (intuitive) tools has another effect. It implies the expectation of scalability. Scalability is the capacity to expand without having to rethink or transform the underlying basic elements of a given system (Tsing, 2011). It prioritises how well all the components fit, how snugly they can be nested together and expanded at will. It values precision above frayed edges. By definition, scalability does not accommodate or value what cannot be precisely determined and what does not fit exactly within the established categories of the given architecture — especially when this is a digital platform and not an IRL event (Morgan, 2018).

What happens to the messing around that nourishes creativity, imagination and free-range experimentation is anyone's guess. Is there a space for a non-standard response to, and interaction with, technologies, platforms, infrastructures?
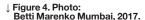
If scalability informs the way in which the triangulation of technologies, infrastructure and governance is effectively designed, we must focus on the opposite pole of the spectrum, where the non-standard, the non-scalar and the non-scalable linger, and where studio mess thrives. Where we encounter the diversity of what does not fit with the blueprint of platform design and does not match the planned growth of infrastructures.
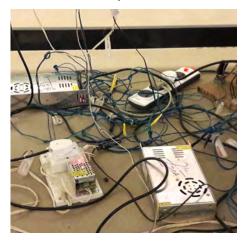
This diversity is not about paying lip service to the entrenched ideology of identity politics. Rather, it is the acknowledgement that diversity means not only difference, heterogeneity and divergence, but disharmony, tension, contradiction and conflict too, and that is where the potential for creative transformation lies.

The focus on the toolification of experience should keep us alert to another thing: how to stay concerned with theory and criticality. Problems concerning tools (and methods) appear to be easier to discuss and to resolve than theoretical ones. To close a protracted argument about tools — especially if it raises uncomfortably competing intellectual and axiological standpoints — our technocrat could always invoke the necessity to be pragmatic, practical, efficient and ask to refocus on the empirical evidence leading to the right solution (Scheinfeldt, 2012).

We do not have a lot of control over the technologies that we use. The platforms we use each day are those with institutional licence, and more will come our way (hello Panopto — an article begs to be written about your name). We do not discuss the values these technologies bring with them (Fletcher, 2019).

And yet, we should. Because we have a lot of control over how we articulate our critical reflection, how we ignite a discussion about the values we stand for and how we keep on observing and nourishing those frayed edges without which we would not even be here. Hello Central Saint Martins.

↓ **Figure 4. Photo:**
  Betti Marenko Mumbai, 2017.

References

Colomina, B. and Wigley, M. (2016). *Are we human? Notes on an archaeology of design*. Lars Müller Publishers.

Esmark, A. (2020). *The new technocracy.* Bristol University Press.

Feenberg, A. (2018). *Technology, modernity, and democracy*. Rowman and Littlefield.

Fletcher, C. (2019). Educational technology and the humanities: A history of control. In M. K. Gold and L. Klein (Eds.) *Debates in the digital humanities 2019* (chapter 30). University of Minnesota Press. Accessed 30 May 2021 https://dhdebates.gc.cuny.edu/read/untitled-f2acf72c-a469-49d8-be35-67f9ac1e3a60/section/ed3d53dd-d7aa-4369-a41f-1098a121e41b

Fogg, B. J. (2003). *Persuasive technology: using computers to change what we think and do.* Morgan Kaufmann.

Hodges, C. B. et al. (2020). The difference between emergency remote teaching and online learning. *Educause Review*. Creative Commons. Accessed 30 May 2021 https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning

Klein, N. (2020). Screen New Deal. *The Intercept.* https://theintercept.com/2020/05/08/andrew-cuomo-eric-schmidt-coronavirus-tech-shock-doctrine/ Accessed 30 May 2021

Morgan, P. C. (2018). The consequences of framing digital humanities tools as easy to use. *College & Undergraduate Libraries*, *25*(3), 211–231. Accessed 30 May 2021 https://hcommons.org/deposits/item/hc:20283/

Munari, B. (1938). The Manifesto of Machinism. *Arte Concreta 10*, 15 December, Milano. Accessed 30 May 2021 https://www.panarchy.org/munari/machinism.html

Scheinfeldt, T. (2012). Why digital humanities is 'nice'. In M. K. Gold (Ed.) *Debates in the digital humanities*. University of Minnesota Press. Accessed 30 May 2021 https://dhdebates.gc.cuny.edu/read/untitled-88c11800-9446-469b-a3be-3fdb36bfbd1e/section/ffbe0616-a8d6-44ac-8f8e-1e4d4359d4f8

Scranton, P. (1995). Determinism and indeterminacy in the history of technology. *Technology and Culture*, *36*(2) 31–53. Accessed 30 May 2021 https://www.jstor.org/stable/3106689

Simondon, G. (2011). On the mode of existence of technical objects. *Deleuze Studies, 5*(3), 407–424.

Tenen, D. (2016). Blunt instrumentalism: on tools and methods. In M. K. Gold and L. Klein (Eds.) *Debates in the digital humanities 2016*. University of Minnesota Press. Accessed 13 December 2020. https://dhdebates.gc.cuny.edu/read/untitled/section/09605ba7-ca68-473d-b5a4-c58528f42619

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References

Tsing Lowenhaupt, A. (2012). On non-scalability: the living world is not amenable to precision-nested scales. *Common Knowledge, 18*(3), 505–524. Duke University Press. Accessed 30 May 2021
https://muse.jhu.edu/article/485828

Weiser, M. (1991). The computer for the 21st century. *Scientific American, 265*(3), 94–104.

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