'Disability & Inclusive Digital Futures: Pandemic Reflections'

By Gerard Goggin (NTU, Singapore) Statement for LKAS Symposium Round table & Manifesto for Inclusive Digital Futures University of Glasgow, 26-27 May, 2021

Introduction

Disability has been inching to the centre stage of global conversations on inclusion and digital futures. There's good reason for this – in terms of the confirmed international will to tackle the severe issues of inequality, injustice, and democratic deficit faced by people with disabilities, now potentially exacerbated with new exclusions associated with emerging technologies and digital societies.

The work of people with disabilities has long put on the digital inclusion agenda issues of web and mobile accessibility, captioning and audio description, disability representation, content, and media work. The place of disability in inclusive media, communications, and information has never been more important, especially with widening though stratified everyday reliance upon apps, data, digital platforms, and other technologies.

The general predicament remains that when we talk about technology, there is a reflex response based on a powerful myth — that new technology will naturally be good for people with disabilities. And better still might help societies 'solve' the problem of disability (Roulstone, 2018). Sadly, we still have to do major ground clearing to point out that:

- 1) If imagined and done properly digital technology could have great possibilities for people with disabilities; however this often doesn't happen (Goggin, Ellis, & Hawkins, 2019; Yu et al., 2019);
- 2) In fact, time and time again new technology is imagined and implemented along old, ableist lines. It's a case of 'new wine in old bottles'; where the new wine is bitter indeed. Accessibility and inclusive design could easily occur, and should be a priority, and properly resourced especially to put people with disabilities in control of shaping the tech. Yet digital exclusion remains, or is only poorly and slowly addressed (Roy & Lewthwaite, 2016; Watermeyer & Goggin, 2018).
- 3) New technology and its contexts of invention, implementation, and adoption often create new kinds of exclusions and injustice (Alper, 2017; Bennett & Keyes, 2020; as has been emphasized in relation to gender, race, and other kinds of social inequalities when it comes to new systems of data, AI, machine learning, and networks (Trewin et al., 2019; Whitttaker et al., 2019).

Disability concerns for inclusive digital futures have been raised prominently and figure among the key lessons learnt in relation to disability, accessibility, and digital inclusion in the COVID-19 pandemic (Goggin & Ellis, 2020).

COVID-19, Disability, & Politics of Digital in the Present Moment

In many countries, people with disabilities were left out of responses to spread of the virus. Key information and messages were not provided in accessible and inclusive communication and formats. The implications for people with disabilities, their families, friends, employers, businesses, schools, community and civil society groups were typically not foreseen, acknowledged, or address. The result was — and remains that many public health and other measures adopted around the world created new barriers, exclusions, and inaccessible spaces.

For example, moving around buildings or streets now closed off meant new obstacles in built environment and the realities and negotiation of access in everyday life. Consider also, the much vaunted reliance on digital technologies, such as those used by the Zooming classes through to digital platforms crucial to food and grocery delivery, e-commerce, and ride hailing or the intense new taken-for-grantedness of the mobile phone with smartphones assumed and COVID tracing and QR check-in apps required in many settings.

There is a potent and possible oppressive sense of digital-by-default in many of our lives, sped out and entrenched in both official responses and everyday making-do in the pandemic over the past 18 months.

Across the great diversity of people with disabilities, this has cut various ways. Where, for instance, the tilt to digitalization has opened up or underwritten forms of inclusive participation for people with disabilities at the same time as new kinds of constraints and regulation of social life, freedom, and mobility have emerged. From many people with disabilities, we have often heard: 'welcome to our world'; that is, now others have to participate in predominantly digital form across a much wider set of activities. Yet also many people with disabilities have been obliged to conform to the so-called 'new normal': teachers asked by schools and universities to switch to online, remote learning via platforms which have inadequate accessibility, poor affordances, and lack of inclusive design. Moderating a Zoom or Teams classroom might now seem a skill everyone should be able to master; but few educational institutions stopped to tackle the barriers to accessibility.

From the pandemic, then, we learn that most of our digital technologies have not been imagined for all humans. In fact, they have been shaped by norms, peopled, and designed by practices, contexts, business models, and power relations that see people with disabilities as an after-thought (Moser, 2006). Rather than thinking digitally via the diversity of beings, locations, and environments, and embracing what disability bioethicist Jackie Leach-Scully calls the 'variant body' — which is the diversity in each and all of us — digital technologies are shaped by and enforce norms

So, what's key for the next 10 years, as we think about, plan for, and enact inclusive digital futures? Here disability considerations and perspectives are key to fully integrate; but also to draw upon for reimagining the approach globally and locally.

Disability Insights for a Manifesto¹

Firstly, the fundamental, democratic reimagining and remaking of the digital and its technological and social imaginaries via disability urgently need to be put at the centre of things (Couldry et al., 2018). Aimie Hamraie & Kelly Fritsch declare in their 'Cripping Technoscience Manifesto': 'We call for greater acknowledgement of the lived experiences and material design practices of disabled people in the work of technoscientific intervention' (Hamraie & Fritsch, 2019, 7). As they underscore this is a profound challenge and opportunity:'We call for crip technoscience practices that challenge the political economy of technology, particularly as it is ensnared within injustices perpetrated by imperatives to fix, cure, or eliminate disability' (Hamraie & Fritsch, 2019, 22). This is a vision of worlds that are inhabitable by all: 'Crip technoscience struggles for futures in which disability is anticipated and welcomed, and in which all disabled people thrive, regardless of their productivity' (Hamraie & Fritsch, 2019, 22). Digital worlds must be modelled for all bodies, for everyone (Hendren, 2020), and especially by those communities typically disenfranchised in shaping and design of technology (Costanzo-Chock, 2020).

Secondly, while significant progress has been made at society-wide levels as well as in the specific domains involving digital technology (which now extend widely and deeply), there are startling areas of inequality in relation to disability. There is unfinished business in areas of digital inclusion where the concepts, evidence, and frameworks for design, policy, and implementation were obvious and established at least two decades ago: Internet and mobile communication; audio media; image, video, and television broadcasting. There are no excuses for government failing to set the rules, in conjunction with citizens and users; and for media and technology companies, as well as the large organizations, especially such as businesses, government departments, educational institutions, and others, to ensure they provide accessible and inclusive technology. Here as well as in relation to emerging technology, the provisions of the Convention on the Rights of Persons with Disabilities (CRPD) — especially the many provisions that reference digital technologies — should be fully and quickly implemented by all governments (Lazar & Stein, 2017).

Thirdly, for CRPD implementation, as well as underpinning and monitoring other action, we need better data, figures, statistics, and research on disability and digital inequalities. There is a leading role here for national statistic agencies, ICT agencies, ministries, and regulators. An important task is to bring together data gathering on disability, on the one hand, and that of ICTs, communication, and media, on the other hand, to produce rigorous longitudinal data that is fit for purpose. Better understanding on the complex, intersectional dynamics of disability and digital inequality across diverse individuals, groups, demographics, socio-technical landscapes, and cultural settings goes hand-in-hand with the data gathering effort.

Fourthly, as well as top priority, disability is a rich resource in terms of innovation, design, and digital inclusion (Langdon et al., 2020; Pullin, 2011). Many technologies have been imagined and designed with users with disabilities in mind. Often disabled inventors, tech developers, and the role of users and communities as key agents in co-design have been forgotten or overlooked. As emerging research indicates, the movement of 'cripping' such technoscience histories and dynamics opens up new perspectives and opportunities (Hamraie, & Fritsch, 2017). It is important to be sceptical about this vogue for disability innovation (Mills & Sanchez, 2018), and focus upon advancing design justice (Costanzo-Chock, 2020). However there is scope for lessons from inclusive disability design and disability technology invention and adaptation to inform general approaches to digital inclusion.

Finally, there are rapidly approaching challenges in digital technology associated with the new social and technical landscapes being widely discussed via discourses of automation, Al, data, computation, and new digital networks (such as 5G and the Internet of Things). As well as the inevitable framing of these technologies as raising concerns of bias and ethics (which they do), there is also a much wider discussion of questions of exclusion, oppression, injustice, and injustice.

References

Alper M. (2017) *Giving voice: Mobile communication, disability, and inequality*. Cambridge, MA: MIT Press.

Bennett C. L., & Keyes O. (2020) What is the point of fairness? Disability, Al and the complexity of justice. *ACM SIGACESS Accessibility and Computing*, Article 5. DOI: 10.1145/3386296.3386301

Costanzo-Chock, S. (2020). *Design justice: Community-led practices to build the worlds we need*. MIT Press.

Couldry, N., et al. (2018). Media and communications. In International Panel on Social Progress (IPSP) (Eds.), *Rethinking society for the 21st century: Report of the International Panel on Social Progress* (pp. 523-562). Vol. 2. Cambridge University Press, 2018.

Goggin, G. (2018). Technology and social futures. In K. Ellis et al. (Eds.), *Manifestos for the future of critical disability studies* (pp. 79-91). Vol. 1. Routledge, 2018.

Goggin, G., & Ellis, K. (2020). Disability, communication and and life itself in the COVID-19 pandemic. *Health Sociology Review*, 29(2), 168-176.

Goggin G., Ellis, K., & Hawkins, W. (2019). Disability at the centre of digital inclusion. *Communication Research and Practice* 5(3), 290–30.

Hamraie A., & Fritsch K. (2019). Crip technoscience manifesto. *Catalyst*, 5(1), 1-33.

Hedren, S. (2020). What can a body do? How we meet the built world. Riverhead Books.

Langdon P., et al. (Eds). (2020). *Designing for inclusion: Inclusive design: Looking towards the future*. Springer.

Lazar J., & Stein, M. A. (Eds.). (2017). *Disability, human rights, and information technology*. University of Pennsylvania Press.

Mills, M., & Sanchez, R. (2018). Design with disability. *Public Books*. http://www.publicbooks.org/design-with-disability/

Moser, I. (2006, October 2). Disability and the promises of technology: technology, subjectivity and embodiment within an order of the normal. *Information, Communication & Society*, *9*(3), 373–395.

Paterson, M. (2017). On haptic media and the possibilities of a more inclusive interactivity. *New Media & Society*, *19*(10), 1541-1562.

Pullin, G. (2011). Design meets disability. MIT Press

Roulstone, A. (2016). *Disability and technology: An interdisciplinary and international approach*. London: Palgrave Macmillan.

Roy A., & Lewthwaite S. (2016). Critical silences: Disability, networked technologies & global south. In S. Grech & K. Soldatic (Eds.), *Disability in the global south* (pp. 483–500). Springer.

Seelman, K. D. (2016) Should robots be personal assistants? In P. Block, et al. (Eds).

Occupying disability: Critical approaches to community, justice, and decolonizing disability (pp.259-272.) Springer

Scully. J. L. (2008) *Disability bioethics: Moral bodies, moral difference.* Lanham, MD: Rowman & Littlefield

Trewin S., et al. (2019). Considerations for AI fairness for people with disabilities. *AI Matters* 5(3): 40-63.

Watermeyer B., & Goggin G. (2018). Digital citizenship in the global south: 'cool stuff for other people'? In B. Watermayer, J. McKenzie, & L. Swartz (Eds.), *Palgrave handbook of disability and citizenship in the global south* (pp. 167-181). Houndsmill, Basingstoke, UK: Palgrave Macmillan.

Whittaker M. et al. (2019). *Disability, bias, and AI*. New York: AI Now Institute, NYU. Retrieved from https://ainowinstitute.org/disabilitybiasai-2019.html

Yu H. et al. (2019.) Introduction: disability participation in the digital economy. *Information, Communication & Society, 22*(4): 467–473.

Bio: Gerard Goggin is Wee Kim Wee Professor of Communication Studies, Nanyang Technological University, Singapore. He is also Professor of Media and Communications, University of Sydney. Gerard has had a longstanding interest in social justice, media, and technology – especially via collaborations on disability and digital inclusion. Key books include *Digital Disability* (2003; with Christopher Newell), *Cell Phone Culture* (2006), *Disability and the Media* (2015; with Katie Ellis), the *Routledge Companion to Global Internet Histories* (2017), the *Routledge Companion to Disability and Media* (2020), and, most recently, *Apps: From Mobile Phones to Digital Lives* (2021).

Notes

¹ These Manifesto suggestions draw substantially from my 2019 paper on disability and digital inclusion with Katie Ellis and Wayne Hawkins (Goggin, Ellis, & Hawkins, 2019; see also Goggin, 2018).