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Digital citizenship and disability in the covid era

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Abstract

The covid-19 crisis has accelerated automation and digitalization in many aspects of social life. Social distancing and lockdowns, combined with the imperative to preserve economic activity, have seen much work and education move online, while the digitalization of government services has intensified. These developments slowed the spread of covid-19 but their broader effects, both positive and negative, have been unevenly distributed. One group for whom covid-driven digitalization has been especially ambivalent is people with a disability. While remote forms of communication and work have afforded physical health protections to many disabled people, these same forms have had exclusionary effects that magnify pre-existing disadvantages and diminish citizenship rights. This article analyses this ambivalent dialectic and the politics of neoliberal digital citizenship with which it is enmeshed. We argue that digital citizenship needs to be decoupled from a constraining neoliberal rationality prioritizing ableist individual competition, techno-entrepreneurship and government cost-cutting.

Keywords

Covid-19, digital citizenship, digitalization, disability, neoliberalism, social exclusion

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Introduction

Much has been made of the potential of digital technologies to advance the inclusion and citizenship rights of disabled people (van Holstein et al., 2021; Watermeyer and Goggin, 2019; Yu et al., 2019). Online voting systems make political participation possible for people with restricted mobility and vision impairments. Internet-connected ‘smart’ devices contribute to increased independence in the home and community. An ecosystem of mobile apps and digital platforms is increasingly the means through which disabled people access government services, care workers, jobs, news and media and a range of commercial products and services. These digital technologies are often viewed as ‘salvational, wholly transformative and a great boon for the challenges people with disabilities face’ (Goggin, 2016: 66). They are, their adherents claim, the means for fully realizing the citizenship rights of disabled people, which are so frequently abridged, constrained and/or violated by institutions and built environments embodying ablest assumptions and priorities. As such, these technologies are central to so-called ‘digital citizenship’ – the panoply of individual rights, entitlements and obligations associated with membership of a national state, but exercised or facilitated through the widespread adoption of digital technologies (Hintz et al., 2019; Isin and Ruppert, 2020; Schou and Hjelholt, 2018; Vivienne et al., 2016).

Digital inclusion and equality have been at the forefront of debates about citizenship during the covid-19 pandemic (Buchholz et al., 2020; Kylasam Iyer and Kuriakose, 2022). Covid-related public health measures in wealthy countries like Australia, along with ameliorative economic programmes rolled out by governments, are premised on pre-existing digital technologies and infrastructure, the further development and repurposing of which has been accelerated by government efforts to slow the spread of covid-19. By digitalization we refer to the socio-technical process of ‘leveraging digital products or systems to develop new organizational procedures, business models, or commercial offerings’ (Amankwah-Amoah et al., 2021: 602). Citizens have not benefitted equally from pandemic-driven digitalization, and for some this has introduced new inequalities or exacerbated previously existing ones (Madianou, 2020). People with disability, we show below, have been particularly hard hit by the pandemic and have been differentially affected by institutional responses to it. Moreover, those who identify as disabled, or are assigned the label disability, are not a homogeneous group, and thus their experience of digitalization during the pandemic varies. When disability is overlaid with other forms of socio-economic disadvantage defined by class, indigeneity, ethnicity, gender and sexuality, digital solutions to pandemic-related challenges are further problematized, evincing both successes and failures. Consequently, digital technologies have played an ambivalent role, at times assisting the inclusion of minoritized groups in the exercise of citizenship rights and prerogatives while simultaneously enabling more pervasive forms of social control, surveillance and social exclusion (Eubanks, 2018; Ranchordás, 2020). This expresses perfectly what David Lyon (2010) has summarized as the ‘care-control tension’ at the heart of state deployment of digital technologies ostensibly in the service of welfare goals.

This raises two pressing questions about the relationship between citizenship, disability and accelerated digitalization under pandemic conditions. First, how has pandemic-driven

digitalization enhanced citizenship rights for disabled people, and how has it constrained those rights? Second, is the much-discussed notion of ‘digital citizenship’ adequate for understanding the dynamics of inclusion and exclusion in pandemic conditions, and how does it relate to the broader dynamics of neoliberalism?

In this article, we explore how digitalization in Australia has developed over the course of the pandemic and empirically demonstrate its ambivalent effects on the citizenship rights of the nearly one in five Australians living with a disability. We argue that the binary logic of *either* inclusion *or* exclusion does not do justice to the ambivalent effects that digitalization has for the citizenship of ‘disabled Australians’, a category which is itself internally differentiated. In so doing, we develop a critique of laudatory accounts of digital citizenship according to which digital technologies offer a panacea for various social ills, including the intersectional inequalities and injustices that characterize disablement. An important contribution is to suggest that such ‘digital utopianism’ (Turner, 2008) obscures the ascendant neoliberal rationality and individualism with which hegemonic notions of digital citizenship are thoroughly enmeshed. Hence, while the pandemic-induced acceleration of digitalization has often been necessary for citizens’ physical, economic and social well-being, it also harbours perils and limitations. These are articulated by the voices that we draw on from Australia’s recent *Disability Royal Commission* (DRC) to describe disabled people’s experiences of digital technology use and exclusion during the pandemic (<https://disability.royalcommission.gov.au/>). The DRC offers valuable insights into the ways in which pandemic-driven digitalization impacted particular communities of disabled people. As such, mining the rich resources that the transcripts of the DRC offer and interrogating these through the lens of our critique of dominant readings of digital citizenship are additional contributions to the field of disability and digitalization studies.

We begin by situating our study within the broader debate about digital citizenship and its relationship to neoliberalization. While digitalization has undoubtedly benefits and even emancipatory potential, its development has been bound to, and therefore restricted by, a dominant neoliberal political-economic rationality that emphasizes individual responsibility, competition and techno-entrepreneurship, whose overall effects are deeply ambivalent. We empirically verify and illustrate these claims in the second and third sections of the article. We respectively consider Australian governments’ digital responses to the pandemic, and the uneven impacts they have had for Australians living with a disability.

Digital citizenship, digital divides and neoliberalism

The covid-19 pandemic, and its associated deepening and broadening of digitalization, was preceded by decades of intellectual reflection on the distinct character of online forms of sociality, governance and political participation, including work on the concept of digital citizenship (Isin and Ruppert, 2020; Mossberger et al., 2008; Ranchordás, 2020, 2021; Schou and Hjelholt, 2019). The various strands of this literature coalesce around the idea that the rights, entitlements and obligations of citizenship are increasingly exercised through and mediated by digital technologies. This brings into being a ‘new ontology of the citizen’, which is ‘different from, but related to, citizens as political

subjects of the state' (Isin and Ruppert, 2020: x). This new ontology of the citizen entails unique configurations of constraint and enablement or, as Vivienne et al. (2016) put it, expanded forms of 'control', new possibilities for 'contest' and novel capacities for creative 'culture' (pp. 3–4).

Not all accounts of digital citizenship, however, take a critical posture to the concept, as do scholars like Isin and Ruppert and Vivienne. Comprehensive reviews of the literature confirm that much of this work has a normative dimension, where digitalization is assumed to be an unalloyed good and where an individualized, 'responsible' image of the digital citizen is presented as a figure of political aspiration (Jørring et al., 2019; Jaeger, 2021). Digital citizenship is assumed to be, on this reading, 'the ideal citizenship in the twenty-first century' (Mossberger et al., 2008: 140). Here, rights are grounded in the *individual* responsibility to be or to become digitally literate and technologically networked. Digital citizenship is viewed as an organic element of modern democracy, where 'access to online technology is as binding to digital citizenship as national geography is to citizenship' (Papacharissi, 2010: 104). This idealizing and individualizing of digital citizenship are expressed in the heavy emphasis on aspects of civics education, digital literacy, digital safety and identity (Kim and Choi, 2018). The 'goal of digital citizenship', in this view, 'is to provide a consistent message to students and educational professionals so that they can become *productive and responsible users* of digital technologies' (Ribble, quoted in Goggin, 2016: 62, our emphasis). What being 'productive' and 'responsible' means is seldom scrutinized much less problematized, especially in relation to disability.

Hegemonic and critical perspectives on disability and digital citizenship

The idealized disabled digital citizen is a similarly productive, entrepreneurial and creative figure, using information and communications technologies to navigate physical-environmental challenges and assert agency through meaningful forms of work (Boellstorff, 2019), identity building (Davis and Chansiri, 2019), socio-political engagement (Elcessor, 2016; Kent et al., 2015) and service provision (McLoughlin et al., 2019). While acknowledging the limits of technology, these accounts express a hopeful optimism that 'patterns of social disablement' that impinge on citizenship can be challenged, if not overcome, through technological innovation (McLoughlin et al., 2019: 521). For Darcy et al. (2019), an expanded citizenship is possible for disabled people if and when their social horizons are broadened through active use of smartphones. Boellstorff (2019) reimagines digital entrepreneurship as a collaborative and creative endeavour, one that can challenge ableist discourses of productivity and tropes of the self-made, self-governing subject. In these more optimistic assessments of technology's transformative potential, scholars 'see the intersection of labouring selfhood, entrepreneurial subjectivity, and active citizenship in digital economic participation by people with disabilities' (Yu et al., 2019: 468).

Dominant models of digital citizenship have been subject to telling criticism, including in critical disability studies (Darcy et al., 2019; Emejulu and McGregor, 2019; Fisher et al., 2021; Goggin, 2016; Ranchordás, 2021; Schou and Hjelholt, 2018, 2019; Vivienne et al., 2016; Watermeyer and Goggin, 2019). These contributions are part of a broader

‘critical turn’ in digital citizenship studies, the shared premise of which is that rather than being an isolated abstraction conditioned principally by technological processes, the digital citizen must be understood as part of a larger ensemble of political, economic, legal and discursive developments (Hintz et al., 2019; Schou and Hjelholt, 2018: 508). Expressed differently, ‘the digital citizen can be understood critically as a subject of power and constraints wielded by states and institutions’ (Vivienne et al., 2016: 4). These critiques are in urgent need of amplification and refinement given the normalization of digitalization during the pandemic, and the complacent techno-optimism promising more disability-inclusive futures.

We agree with Emejulu and McGregor (2019: 140) that the largely apolitical, agent-centric accounts of digital citizenship described above are hegemonic. This is not because they dominate the academic literature, but because they reflect and resonate with the dominant neoliberal rationality, discourse and political economy that emphasizes the importance of digital technologies to economic growth and reduced government expenditure, on the one hand, and individual mastery of digital eco-systems to better cope in a fast-changing, ‘disrupted’ world, on the other. It is this figure of the digital citizen that informed government responses to the pandemic, we suggest below, and it is this figure that demands critical scrutiny.

In the first instance, hegemonic conceptions of digital citizenship obscure the neoliberal political economy with which digitalization is clearly implicated. Neoliberalism has been the subject of a voluminous scholarship over recent decades (Brown, 2015; Dardot and Laval, 2013; Harvey, 2005; Peck et al., 2018). Research inspired by Michel Foucault’s work on governmentality suggests that neoliberalism is not only an economic doctrine or political ideology, but is also a ‘normative order of reason’ and ‘governing rationality’, which ‘transmogrifies every human domain and endeavor, along with humans themselves, according to a specific image of the economic’ (Brown, 2015: 9–10). Today, citizens are expected to engage in continual self-improvement and striving in the competitive quest to succeed, which is typically understood in narrow economic terms. In this neoliberal view, citizenship is conditional on conforming to an ideal of industriousness, economic striving and self-promotion that reproduces dichotomies of the ‘deserving’ and ‘non-deserving’ in new forms. Becoming an ‘agile and flexible’ user of new technologies – as the Federal Minister, Stuart Robert, put it in the foreword to his government’s *Digital Strategy* (Australian Government, 2021a) – and embracing the opportunities for self-improvement that they offer are integral elements of being a ‘good’ citizen. It is this normative, neoliberal figure of good citizenship that has become increasingly intertwined with digitalization and the dominant conception of the digital citizen (Schou and Hjelholt, 2019).

Between ableism and neoliberalism: imaginaries of digital citizenship

The radical critique of neoliberal-inspired digital citizenship resonates with a parallel though largely separate conversation taking place in critical disability studies. Here, disability is argued to be a ‘strategically crucial category’ in the neoliberal (re)regulation of labour markets and social security regimes in the digital age, and thus ‘can help us explore the deep cultural underpinning of digital citizenship’ (Goggin, 2016: 75; Soldatić,

2019). Technology features strongly in the neoliberal imaginary of disability, in which ‘empowered disabled consumers . . . should be able to use mainstream, commodified digital technology . . . to meet many of their needs and desires’ (Watermeyer and Goggin, 2019: 170). In turn, neoliberal imaginaries of disability have much in common with hegemonic, ableist models of digital citizenship previously discussed. At the centre of both is the idealized figure of the digital ‘entrepreneur’ who betters themselves by maximizing their human capital through productive and responsible use of digital technology. The digital citizen is ‘expected to be inherently market-oriented, involved in continuous work (in order to optimize their competitiveness), responsabilized for otherwise collective risks and highly individualized’ (Schou and Hjelholt, 2018: 511).

The disabled digital citizen also encounters a second set of normative expectations. As well as self-improvement, digital citizenship for disabled people is also about overcoming social barriers and inequalities through forms of digital self-advocacy and entrepreneurialism that bare all the hallmarks of neoliberal governmentality (Brown, 2015; Schermuly et al., 2021). Yet, there is a paradox here, wherein ‘the promise of technology to overcome social barriers is alongside digital exclusion of people with disability whose online activities vary depending on their disability, digital skills, and socioeconomic conditions’ (Yu et al., 2019: 468). This paradox cannot simply be understood as resulting from a ‘digital divide’ centred around access to, or capacities to use, digital technologies (Ragnedda and Ruiu, 2017). Access and capacities remain considerations, but they are conditioned by other forms of social disadvantage, exclusion and oppression, and forms of economic, cultural and social capital (Selwyn, 2004). These have been labelled by some as a ‘third digital divide’, which is distinguished from first- and second-order digital divides by its focus on the ways networked digital technologies intertwine with and reinforce broader social divisions of class, culture, gender, disability and so on (Ranchordás, 2022; van Deursen and Helsper, 2015).

Digital divides and their differential effects for people with disability

Until recently, there had been little engagement with disability in the literature on the third-level digital divide. Where disability did appear, it was often “‘tacked on” to other concerns . . . and little understood’ (Goggin, 2018). This is changing, however, with scholars arguing that people with disability occupy a distinct and highly unequal position with respect to digital technology (Ellcessor, 2016; Jaeger, 2012), especially where disability intersects with other axes of social disadvantage (Goggin and Ellis, 2020; Goggin and Soldatić, 2022). Lin et al. (2019) posit disability as ‘the most disadvantageous status of the “information have-nots”’, with disabled people ‘becoming one of the most extreme but traditionally ignored populations of the “digital divide”’ (p. 555). There is also growing interest in how the digital divide expresses itself in the neoliberal governance of disability through digital means, including through algorithmic and automated decision-making (Goggin and Soldatić, 2022; Watling, 2011; van Toorn, in press; van Toorn and Scully, 2023). This literature points to a growing trend in the use of digital tools as part of a punitive, anti-welfare ideology that targets the disabled poor and indigenous people with disability, among other disadvantaged social groups. It both reveals and exacerbates the dialectic of citizenship inclusion and exclusion.

It is important at this juncture to stress that the binary language of divides, inclusion and exclusion, should not be understood as static, all-or-nothing states. As Singh and Jackson (2017: 1) suggest, digital inclusion/exclusion is better thought about as an ongoing, fragile process occurring over time, where inclusion/exclusion is unevenly experienced ‘at the seams of multiple interconnected [information and communication] systems’ (p. 1). Many citizens stand awkwardly between these systems, and their inclusion depends on the ‘artful and often challenging negotiation of the seams’ (Singh and Jackson, 2017: 10). Other groups, including migrants, refugees, temporary residents, prisoners, internally displaced peoples and people with intellectual and psychosocial disabilities, are routinely denied the rights of citizenship altogether (Buckley et al., 2015). This gives rise to a *spectrum* of outcomes that are never complete, but always subject to further contestation and change. When this approach is applied to citizenship, digital or otherwise, we similarly see that it is not the clear-cut, de jure status that it is often presented as being. Instead, de facto citizenship rights and entitlements depend on the ‘artful and often challenging negotiation of the seams’. Clearly some groups are better equipped for this task than others, especially as digital government portals and smartphone apps, the pandemic has shown with great clarity, are increasingly the gateways for accessing services, and thus realizing citizenship rights. Where one does not have access to digital technologies or is unable to effectively negotiate their complexities or – owing to the compounding effects of other forms of social disadvantage – is unable to fulfil the normative ideal of the digital citizen or is subject to intensified surveillance and control when they do use them, then one’s citizenship is diminished (even if not formally extinguished).

To sum up, the pandemic has drawn into sharp relief much of what is at stake in debates about digital citizenship and digital divides, especially as they relate to disability. The remainder of this article explores how the pandemic has amplified and accelerated public-sector digitalization efforts that both reflect and reinforce hegemonic models of digital citizenship, with deeply ambivalent effects for disabled people.

Public sector digitalization strategies in Australia during the pandemic

Digital technologies have been central to private- and public-sector responses to covid-19 in Australia. Pandemic-driven digitalization in the public sector can be usefully divided into four types of responses: those responding to the need for swift and reliable communications between federal and state/territory governments and citizens, those that addressed the health crisis directly, those that addressed the social and economic consequences of the health crisis and those designed to meet educational needs of students who were unable to physically attend schools and universities. Under Australia’s federated system, state and territory governments were responsible for responding to the pandemic through public health measures, including lockdowns and school closures. The federal government oversaw border control, social assistance and economic stimulus programmes and the national covid-19 vaccination programme.

In terms of communication, the federal government moved early in the pandemic to repurpose the Australia.gov.au homepage as a “one-stop shop” for Commonwealth and State and Territory Coronavirus information and support services (Australian Government,

2020a). In March and April 2020, under the auspices of the Digital Transformation Agency (DTA), a Coronavirus Australia information app and WhatsApp chatbot were also deployed to enhance access to reliable centralized information. There were initiatives specifically for people with disability, such as the Disability Gateway, comprising a website, social media channels and a dedicated phone number for people seeking information and services related to covid-19. These initiatives, however, fell short of what was required to provide accurate and timely information to digitally disconnected and disadvantaged communities of people. Disabled people in residential settings, for instance, were 'shocked' when they learnt of the Federal government's decision to deprioritise people with disability in phase 1a of the vaccine rollout. The lack of timely, accessible communication meant people with disability lost the opportunity to challenge the decision. In addition, confusion surrounding vaccination 'may have contributed to vaccine hesitancy among some people with disability, including people at greatest risk of serious consequences from covid-19' (Australian Government, 2021b: 8).

Digital tools that addressed the health crisis directly included contact tracing technologies such as the government's COVIDSafe app and quick response (QR) codes linked to state and territory government apps. The coordinated rollout and monitoring of mass vaccination was another government programme that depended heavily on digitalization. While the use of Medicare cards and data for booking and recording vaccine shots promised, and largely delivered, an effective system for promoting and tracking vaccination, these digitalized vaccine recording systems, like communications about the vaccine programme itself, rested on problematic assumptions about digital access and literacy.

A third area where digital tools were widely deployed was in education. During Australia's first and second covid-19 waves, schools were mostly closed to students in states where stay-at-home orders applied. Though mandated by governments, the onus was placed on individual schools and teachers to implement online teaching, which involved digitizing learning materials and utilizing online platforms to store content, deliver coursework and facilitate interactions between students and parents or guardians. Despite some state assistance, the inclusiveness of online education was ultimately determined by the capacity and resources of individual schools. While remote learning had benefits for some students, many families with children with complex needs found themselves isolated and ill-equipped to meet the challenges of online schooling (Dickinson and Yates, 2020).

Finally, the pandemic saw governments utilize existing digital infrastructures to implement ameliorative economic programmes for individuals and businesses. An initial federal government package of \$66 billion, announced in March 2020, doubled the value of job seeker payments (Australia's unemployment benefit) (Australian Government, 2021c). The federal government subsequently announced a \$130 billion 'job keeper' package aimed at keeping employers and employees linked until the economy emerged from hibernation. Two \$750 stimulus payments were issued to people on the aged and disability pensions (Goggin and Ellis, 2020). These economic stimulus efforts drew on and expanded the digital interfaces between Australia's health, welfare, taxation and employment systems, which had been increasingly joined up and automated in the years leading up to the recent crisis.

Australia's covid-inspired repurposing and acceleration of digitalization has been viewed by many, not least governing politicians, as a great success. There is some empirical support for this interpretation. Notwithstanding some glitches, digital technologies were essential for effective communication about the virus, as they were for the maintenance of social distancing and the preservation of employment and continuity in education. Digitalization was a cornerstone of Australia's testing and vaccination regimes, which have contributed significantly to both its relatively low rates of infections, hospitalization and deaths from covid-19, and to its economic recovery (Australian Strategic Policy Institute, 2020). Yet while these successes should be acknowledged, this must not be at the expense of recognizing the more problematic aspects of these technological developments, which have been further embedded and normalized by the crisis. These are intimately linked to neoliberal forms of governance that constrain citizenship within very narrow limits while exacerbating marginalization for those who, like people living with disability, experienced significant barriers and inequalities before the pandemic.

Digital citizenship during a global pandemic: disabled people's experiences of life in lockdown

In this section, we explore everyday experiences of technology use and digital exclusion during the pandemic through qualitative analysis of documentary sources. These include research reports, submission statements and Hansard transcripts of the public hearings held during the Australian DRC. Headed by six independent commissioners from the public and civil society sectors, the DRC was established in April 2019 in response to community concern about violence, abuse, neglect and exploitation of people with disability. Although it was not intended as an inquiry into disabled people's experiences of pandemic life, the timing of the inquiry coincided with the first two waves of covid-19, when much of Southeastern Australia was living in 'lockdown'. In the early weeks and months of the pandemic, the DRC was overwhelmed with submissions and phone calls detailing the often harrowing experiences of disabled people and their families, whose access to essential services, food, medicines, health care, protective equipment and social contact had been abruptly interrupted or terminated (Australian Government, 2020b: 4). In response, the DRC included within its purview 'the adequacy of measures taken to preserve the health, safety and wellbeing of people with disability during the pandemic crisis', devoting two public hearings to issues of institutionalized discrimination and exclusion in the pandemic response (Australian Government, 2020b: 5). These two hearings were held in August 2020 and May 2021, respectively.

Notes on method

The Hansard (parliamentary) transcripts from these hearings were collected in April 2022 and analysed using a concept-driven coding process (Gibbs, 2007). Author A found through a first reading of the transcripts that digital exclusion was an important theme emerging from witness accounts of the pandemic response, particularly in areas pertinent to citizenship, such as education and social services. These concepts formed the basis of a coding framework, which was further adapted and refined through an abductive

process resembling Ritchie et al.'s (2003) method of framework analysis. This method involved (1) *familiarizing* ourselves with the transcripts, (2) *identifying* a series of themes generated through subsequent readings of the transcripts and the literature on digital citizenship, (3) *indexing* (coding) the data against this thematic framework, (4) *charting* the data in table form to identify patterns, and (5) *mapping and interpreting* these patterns in light of our research questions. Through this process, the additional concepts of responsibility, individualisation and ambivalence emerged and were incorporated into the coding frame as connecting themes. In what follows, key findings from this analysis are discussed across interrelated areas of digital citizenship, accompanied by relevant excerpts from the transcripts that illustrate the ambivalent effects of digitalization on disabled citizens' experiences of the pandemic.

Digitalization's ambivalent effects for people with disability

Prior to the pandemic, involuntary isolation was a normal part of life for people who, for reasons of chronic ill-health, disability or mental distress, were confined to the home (Goggin and Ellis, 2020). The pandemic merely normalized this experience for the broader community, necessitating a societal shift from face-to-face to online work, learning and leisure. This brought widespread benefits to digitally literate and connected people with disability who gained access to a wider repertoire of spaces and experiences than was previously available, as events, services, resources and social networks increasingly moved online. In the first year of the pandemic, a national representative body for people with disability reported that '[s]ome of these changes have been good, with increased access to services online. . . Access to telehealth during the pandemic has been well received by many people with disability' (People with disability Australia, 2020: 1, 7).

Nevertheless, there remained a certain ambivalence in the role of digital media in facilitating this enhanced accessibility. On the one hand, an expanded world of online socializing, work and consumption meant that people with limited mobility could now inhabit the same (virtual) spaces as others, and do so on an equal footing. On the other hand, this opening of worlds also opened minds to the realities of 'normal' life for the socially isolated, prompting fears of a return to that normal. As one DRC witness described, 'Everything I have been campaigning for, for 20 years, has now been dropped in my lap. . . it is all up there in my computer. . . I'm so scared they are going to go' (Australian Government, 2020c: 91).

In an essay titled *The Disability Pandemic*, writer and disability activist El Gibbs recounted the double life she lived during covid-19 lockdowns:

I lived in two worlds during COVID. One that suddenly got more open and inclusive, where I was asked to talk at events, on television, to Senate committees. I pasted lipstick on, and calmed my frizzy hair, adjusting a badly fitting shirt, so I could tell the world that disabled people needed help. Then I would scrub it all off, limp to the kitchen and face the anxiety swarm about there being no food. (Gibbs, 2022: n.p.)

With high levels of digital literacy enabling both personal and political forms of engagement, Gibbs would be considered a model digital citizen. Yet in her case, digital capital

was no buffer against the breakdown of infrastructures of face-to-face disability support caused by localized covid-19 outbreaks and the cessation of services. Australia's public health response to covid-19 both produced and was shaped by social disparities in the way human life is valued and needs are met through collectivized public resourcing (as evidenced by the deprioritization of disabled people in residential settings in the government's Covid-19 Vaccine Rollout Strategy). For Gibbs and many others, an expanded *digital* citizenship was accompanied by a diminished *social* citizenship, marked by isolation, loneliness and the 'collapse [of] fragile support arrangements' (Gibbs, 2022: n.p.).

Similarly, in the education space, the dramatic expansion of digital and online learning environments went hand-in-hand with the collapse of essential offline supports for students with disabilities. A survey of Australian students with disabilities and their families found sharp decreases in the various supports students had received prior to the pandemic, including curriculum modification, learning support workers, specific aides and equipment, personal and behavioural supports and access to specialist allied health services (Dickinson et al., 2020). At the same time, the DRC was hearing evidence that the shift to online learning had precipitated a marked decline in the quality of education for students with additional learning needs, and that the problem was bigger than a lack of digital competencies. For low-income families and remote communities, in particular, there were important structural impediments, including lack of affordable Internet access, cultural and language barriers and digital infrastructures and content unsuited to the specific needs of students with learning disabilities. As such,

pupils with disabilities were the least likely to benefit from distance learning solutions such as online learning and this is particularly important for those with intellectual disabilities. . . . They face important barriers. One is the inaccessibility of the remote or distance learning systems, the lack of support, barriers in accessing the internet, inaccessible software and learning materials. (Australian Government, 2020c: 184)

At the local level, many schools neglected to implement additional supports for students with disabilities, or considered them as an 'afterthought' once other students had successfully transitioned online. One parent of a child with autism recounted her experience of learning via the digital platform Google Classroom:

[The pandemic] was quite a difficult time for us, especially in the early stages because I felt that my daughter was an afterthought. . . . she had not been added [by her teacher] to the Google Classroom, which is the platform that all the other students were using. (Australian Government, 2020c: 168–169)

The witness reflects further on the assumptions underpinning this form of digital exclusion:

I think at the core of this there is some deeply rooted ableism where there is a view that students with disability are an add-on, a burden, that they belong somewhere else. (Australian Government, 2020c: 171)

Even when mediated by digital platforms, teaching and learning are situated practices that take place within larger, social-relational systems, whose dynamics are reflected in

the interactions between key agents (e.g. teachers) and their environment. Teachers' capacities to accommodate a diversity of student needs and abilities require resources, institutional support and, importantly, time. The pandemic reveals that in Australia at least, these enabling factors are often absent. The work of including the most socially and digitally disadvantaged students often falls on over-worked teachers, and in times of crisis, such as during a pandemic, this work is further externalized and privatized within families. Consider, for example, the experience of the parent quoted above, who had to request that her daughter be added to the Google classroom so she could participate in school alongside her peers. Examples such as this reveal in stark terms the unequal treatment of differently disabled communities in the digital domain. It also suggests that understanding the source of this discrimination requires a 'decentering' of technology (Gangadharan and Niklas, 2019) and a (re)mapping of digital citizenship as a site of social struggle in which the right to inclusion is perpetually negotiated and contested. If it is to be useful in challenging discrimination and exclusion, digital citizenship needs further refinement with respect to its relationship with the structural determinants of digital inequality. This is especially true for people with disability for whom apolitical notions of digital citizenship are highly problematic. The undue focus on individual competencies deflects attention from the social determinants of digital exclusion, and their intersections with the political economy of digitalization.

Neoliberal responsabilization in the age of covid-19

In the era of covid-19, this political economy has been shaped by neoliberal, individualized 'responsibilisation'. In education, for example, we noted above how the work involved in facilitating digital inclusion is often performed in the private sphere, with 80% of the respondents to the aforementioned survey reporting that the 'responsibility for [online] education shifted away from teachers and schools and on to parents' (Children and Young People with Disability Australia, 2020: 2, 3). In the social security domain, where digitalization has consolidated a trend towards 'self-service', responsibility for much welfare administration has fallen to claimants rather than government employees (Whelan, 2020: 878). During the pandemic, this administrative burden presented problems for people with disability attempting to access services and payments to which they were entitled as citizens. Over a year into the pandemic, many disabled welfare claimants were still confronted with inaccessible and obstructive online processes, which meant they had to attend Centrelink Centres (the central benefits office) in-person, despite obvious health risks (Spinal Cord Injuries Australia, 2021: 7). In trying to access disability pension payments, 'people found it daunting to navigate self-service computers', while contacting Centrelink for help via phone involved prohibitively long wait times (Spinal Cord Injuries Australia, 2021: 7).

In terms of the digitally facilitated individualisation of citizenship rights, there were striking parallels in the vaccine rollout and in the broader government response to managing health risks to the disability community. As discussed above, Australian governments relied heavily on digital means of communication, erecting online infrastructures to assist people to find information and access resources. Among these were online vaccine booking systems, overseen by state governments, which were the principal gateway

to vaccination. Yet despite the importance of these systems being universally accessible, their design did not reflect the needs or rights of disabled users. There was a problematic assumption that individuals could navigate these systems with minimal or no assistance, or supporting information. As the one DRC witness explained,

we're basically on our own. . . . There is a website that . . . you can go to and answer a whole lot of questions and then they say, 'Yes, you're [in priority group] 1A and these are the sites [vaccination clinics] that you might like to book into'. . . . But there was just absolutely no information whatsoever. So we were just left with fending for ourselves. (Australian Government, 2020d: 11)

Many individuals with disability, or their families, had the competencies required to navigate these systems. Yet digital outreach and communication strategies were less inclusive for disabled people who lacked the basics of digital citizenship, such as access to the Internet. For this digital underclass of people, the absence of social support made Internet access all the more challenging. This was highlighted in the DRC, with one witness noting that information disseminated through digital media

doesn't reach some of the very significantly disadvantaged people who live in, say, assisted boarding houses . . . [who don't] have a phone or have any access but may have trusted organisations or workers that they rely on but during this pandemic would not have had access to. (Australian Government, 2020b: 71)

Techno-solutionism and social deprivation

For disabled people in regional and remote areas, and indigenous people with disability, the gaps in digital information dissemination were even more pronounced. Speaking about the online Disability Gateway, Damian Griffis, representing the First Peoples Disability Network, told the DRC,

I fear that there is a view in government that this will be the fix-all for all things disability. The Disability Gateway will not be able to address the poverty experienced by many Australians with a disability. It is utterly meaningless to an Aboriginal man with disability who's homeless, living on the riverbed in a remote community. (Australian Government, 2020d: 259)

The point here is not just that technological fixes do not work. It is that they fail to work because, in Griffis' words, they are 'meaningless' in contexts where basic human needs are not met. The conditions that enable people to exploit the potential of digital technologies are absent. A DRC witness made a similar observation about the limitations of digital solutionism, particularly in contexts where age, disability and poverty interact:

One situation where we at the Deaf Society wanted to help a Deaf person who is a senior citizen. . . to purchase a smartphone so that they then could access information online and know what was occurring in the community. However, many people like this cannot afford a smartphone. They live on a Disability Support Pension and affordability becomes prohibitive. (Australian Government, 2020b: 79)

During the pandemic, there were attempts by the government to address the affordability issue through policies aimed at supporting digital entrepreneurship. For instance, people in receipt of disability support funding could spend \$1500 on 'low cost' assistive technology, such as smart devices, to help maintain connectivity (Australian Government, 2020c). While generally welcomed by the disability community, the initiative underscores the hold that digital solutionism has on disability policy, wherein digital media are posed as the answer to the political and moral challenges of disability rights and inclusion.

The experiences of people with disability during the pandemic exposed the 'cruel optimism' of techno-solutionism, which asks individuals to overcome their digital exclusion without addressing the forms of socio-technical organization that cause it. 'What is cruel is not only the broken promises, but that the solution is reproducing and enhancing the weight of the problem' (Runswick-Cole and Goodley, 2015: n.p.). We see many examples of this across different domains of disability citizenship: the disability pensioner required to risk covid-19 infection to attend in-person appointments at the Centrelink benefits office, due to inaccessible and obstructive online bureaucracy (Visontay, 2021); the vision-impaired man who, due to the absence of tactile markers, has difficulty accessing the QR code (O'Flaherty, 2021); and the deaf person forced, due to lack of Internet access, to 'physically present themselves to the Deaf Society and have one of the staff members explain information in a language suitable to them' (Australian Government, 2020b: 80). Taken together, these examples illuminate the ambivalence at the heart of digital citizenship before, during and after the pandemic.

Conclusion

The covid-19 pandemic has accentuated the deeply ambivalent role that digital technologies play in the lives of disabled people, at once enabling new forms of connectivity, inclusion and convenience in some respects while entrenching exclusion and inequality in others. Some disabled and non-disabled citizens are better equipped for 'artfully negotiating the seams' (Singh and Jackson, 2017: 10) where socio-technical systems meet than are others. Government responses to covid-19 have thus highlighted the limitations of abstract digital citizenship, conceived as a toolkit of individualized *and individualizing* digital practices, capacities and affordances. What this dominant notion of digital citizenship implies for disabled people is that if only they master these specific competencies, then a more socially just (digital) world is possible in which all disabled people are included as equal citizens. Pandemic conditions exposed the superficiality of this approach. In a context of heightened risk and reliance on digital technologies, individual competencies alone proved insufficient to overcome structural dimensions of unequal power relations of disability.

These power relations, and the social inequalities that they reproduce, were borne out in *differentiated experiences of digital citizenship* for disabled Australians during the pandemic. For many disabled people, the digitalization of everyday life brought undeniable benefits but also troubling gaps in access to social resources, opportunities, rights and spaces of public participation. Digitalization had an enabling and empowering effect for *some* disabled people in *some* respects, even as it curtailed their citizenship rights and

opportunities in others. It has certainly not been the technological panacea for disabled people that celebratory accounts of digital citizenship promise. On the contrary, the pandemic has exposed the limitations of digital citizenship, or at least thin versions of this concept ‘that obscure the politics of the digital and reproduce exclusionary and capitalist forms of citizenship’ (Emejulu and McGregor, 2019: 143). This latter, neoliberal-inspired version of digital citizenship is, we suggest, incapable of fully realizing citizenship for disabled people and other disadvantaged groups.

This does not mean that digital citizenship per se must be abandoned as a scholarly concept or as a political goal. Clearly, digitalization has been invaluable in blunting the most destructive consequences of the pandemic for disabled and non-disabled people alike, while the enhancement of citizenship rights via the deployment of digital technologies is both possible and desirable. But for this to occur in any meaningful way, digital citizenship needs to be decoupled from a constraining neoliberal rationality prioritizing individual competition, techno-entrepreneurship, government cost-cutting, and ableism. The challenge for scholars of digitalization and disability is to identify the connections between these priorities and the truncation of citizenship, wherever they occur. This will contribute to a more sophisticated understanding of possible paths beyond hegemonic understandings of digital citizenship.

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